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## Manufacturers' Record.

RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, Vice-President.  
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### COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

### THE PRESIDENT'S PANACEA.

Because during the fall campaign President Roosevelt talked so much about labor and capital and about "trusts," because the effort was made to give the unthinking an impression that he was fighting "trusts" and that "trusts" were fighting him, the public naturally expected that his message to Congress would suggest legislation for the prevention of the many ills with which the American people had begun to be persuaded it was direly threatened. One-third of the message was devoted to a discussion of these special and co-related subjects, and the recommendation which he made was as follows:

I believe that monopolies, unjust discriminations, which prevent or cripple competition, fraudulent overcapitalization and other evils in trust organizations and practices which injuriously affect interstate trade can be prevented under the power of the Congress to "regulate commerce with foreign nations and among the several States" through regulations and requirements operating directly upon such commerce, the instrumentalities thereof, and those engaged therein.

I earnestly recommend this subject to the consideration of the Congress with a view to the passage of a law reasonable in its provisions and effective in its operations, upon which the questions can be finally adjudicated that now raise doubts as to the necessity of constitutional amendment. If it prove impossible to accomplish the purposes above set forth by such a law, then, assuredly, we should not shrink from amending the Constitution so as to secure beyond peradventure the power sought.

Granted, as President Roosevelt says, that "the power of Congress to regulate interstate commerce is an absolute and unqualified grant, and without limitations other than those prescribed by the Constitution," which is in a manner traveling in a circle, his recommendation banks ultimately upon an amendment to the Constitution, which is deferring things for a long time, if not forever. And surely such a bill as that introduced by Senator Cullom, amend-

ing the Sherman law, with a squint toward Senator Cullom's pet monstrosity, the regulation of interstate commerce, is hardly calculated to relieve the situation. It seems to have the same inspiration as the law creating the interstate commerce commission, and is not unlike the anti-trust laws passed in so many States, and which have been declared to be unconstitutional.

But there is no reason for hopelessness. From the midst of the crystallization in his message of the striking generalities of his campaign speeches shines forth the real solution of the difficulties. President Roosevelt says:

Every employer, every wage-worker, must be guaranteed his liberty and his right to do as he likes with his property or his labor, so long as he does not infringe upon the rights of others.

There the whole thing is in a nutshell. It is but an epitome of the remedy suggested by the Manufacturers' Record on July 31 last, as follows:

To a man without political aspirations, and ambitious only for the peace and prosperity of his country, the remedy for possible evils, outgrowths of the era of combination and consequent change in methods and in thought, seems to lie close at hand without the necessity for one stump speech or for one pretense at law-making. It is to be had in what President Roosevelt characterized in his Fourth of July oration as "honest and fearless administration of the laws as they are on the statute-books." By that, of course, is not meant fearless and honest administration of laws that have been placed on the statute-books as a sop to Cerberus, as a deceptive response to popular agitation, and which consequently contain the reasons for their own negation whenever a serious attempt may be made to execute them, but fearless and honest administration of existing laws for the maintenance of justice and equity, and covering quite adequately the relation of an individual to his fellows or of a corporation, be it one of \$50,000 or \$2,000,000,000 capital, to the public.

For there may be quite as much demagoguery in administration of laws in attempting prosecution under defective statutes as in the making of such laws.

Fearless and honest administration of the law goes straight to the root of the whole matter. The more weighty the issues involved the greater the need, not for more laws creating confusion and occasions for delay in courts, but for absolute honesty and unflinching courage in executing existing law. A thought of plain everyday law as applied, for instance, to the anthracite coal situation, with its notable publicity, at the hands of a righteous judge without fear and without reproach and of a prosecuting attorney with no political or personal debts, past, present or prospective, law recognizing no difference between a labor union and a corporation when a boycott is to be considered, law permitting to go unrebutted and unpunished no conspiracy against the public welfare, suggests a course of action that might make unnecessary, if not ridiculous, the anti-trust politics with which the country is threatened. For it would demonstrate that there is already law enough to meet every emergency.

In his message the President, on sociology bent, said that "our people are the sons of the men who had iron in their blood," and that "we do not shrink from the struggle before us." In view of those facts it might not be amiss to suggest that the sturdy stock "seated on a continent flanked by two great oceans," descendants "of men winnowed out from among the nations of

the Old World by the energy, the boldness and love of adventure," have no reason to shrink from the struggle, and ought to be able to produce officers with sufficient iron in their blood to enforce the laws without resort to the crutch of a constitutional amendment, without setting dangerous precedents in the administration of the national banking laws to meet exigencies due to speculation, without a possibility of laxity in the administration of the tariff laws to meet a fuel emergency, and without the promise from the Executive to do all within his power to obtain a settlement of questions between miners and operators in accordance with the report of a coal-strike commission which had not been appointed.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 54 and 55.

### OUR INTERESTS IN THE EAST.

President Roosevelt has shown wisdom and judgment in appointing Mr. John Barrett as minister to Japan. He could have found no one better qualified for that important position than Mr. Barrett. He is thoroughly acquainted with conditions in the Orient, has all the qualities needed for successful diplomacy, and as minister to Siam, under the last Cleveland administration, demonstrated that he was keenly alert to the opportunities for the advancement of American commerce in the East. His letters in the Manufacturers' Record at that time iterated and reiterated the importance to the South, and especially to the textile industry of the South, of the markets of Japan, China and other parts of Asia. And his business qualifications were notably recognized recently in his appointment as commissioner in the East for the Louisiana Purchase Exposition. The next few years are likely to develop conditions in the East strongly affecting for good or ill American industrial and commercial interests. Minister Barrett may be expected to do effective work from his position in Japan toward turning those conditions to the welfare of America.

### A FAR-REACHING MENACE.

In a statement last week before the Senate committee considering a bill providing for an extension of the eight-hour labor law affecting government contracts Mr. Summerfield Baldwin, a leading manufacturer of Baltimore, said that the majority of the working people are not in favor of the proposition, and added:

The bill is simply another step toward forcing a universal eight-hour law on the manufacturers, and if it passes will affect all interests except, possibly, that of the farmers.

Testimony before the industrial commission shows that there was an intention to include, if possible, farm labor in the scheme of the American Federation of Labor. And it is not at all un-

likely that the success of this proposed law would be detrimental to the farmers, not only indirectly, as sharers in the fortunes of the manufacturing industry of the country, but directly, in the embarrassments arising from the efforts of organizers to disorganize their employees.

### A MESS CENTERING IN ALABAMA.

When, into the midst of a rapidly-growing movement in behalf of the right education of the whites of the South, was launched a movement originating in a conference in behalf especially of negro education—a movement to promote education "without distinction of race, sex or creed," or, as it was otherwise expressed, for like education of whites and negroes—a movement which was described by one of its advocates as making "the same appeal to patriotism that the problem of obliterating slavery itself made, with this fortunate difference: the abolition of slavery had to be accomplished against the opposition of the South and the abolition of ignorance may be accomplished with the South's heartiest co-operation," North Carolina was for some reason or other held in some quarters to be a sort of Gibraltar for the new undertaking, which, indeed, was given earnest support by some Southerners. Nevertheless, in North Carolina there seems to be under development a reaction which has recently found expression in a stringent report by the public institution board upon conditions at the State institution of Greensboro for the industrial training of negroes. This report has not gone unchallenged, but its significance appears in a dispatch from Greensboro, as follows:

The effect of the report, if unchallenged, would be to not only destroy the free-school system of education for the colored, but would also dismantle every institution already established to educate the negro along industrial lines. An observant and leading republican here this morning remarked that this recommendation and criticism on the part of the State Board simply meant that Booker Washington, the apostle of industrial education of the negro, had by his entrance in the political field and the social arena of the whites caused a revulsion among people of all classes against him and his work and his industrial education ideas.

The dispatch does not reveal whether or not the author of that opinion is one of the republicans of North Carolina, like those in Alabama, who are endeavoring, in spite of President Roosevelt, to reduce to the minimum the curse of the negro in Southern politics. Nor can it be definitely said that the Greensboro incident had any direct connection with a letter published five days later, in which Booker T. Washington wrote:

What conferences I have had with the President or with any public official have grown out of my position, not as a politician, but as an educator. \* \* \* Under no circumstances could I seek to promote political candidacies or volunteer information regarding men or measures, nor have I done so in the past; but because of the importance I have always sought to place upon education and industry among my people as the basis for the friendly relations between the races, there may be occasions in the future, as there have been in the past, when, if I am so re-

quested, I can give information about men and measures which would tend to promote such friendly relations between the races.

But both this letter, published simultaneously with the letter of President Roosevelt regarding appointments of negroes to office, and the statement in the Greensboro dispatch have a bearing upon the recent publication of the following, bearing upon an appointment made about a year ago:

President Theodore Roosevelt,

Washington, D. C.:

My Dear Mr. President—I send you the following information through my secretary, Mr. Emmett J. Scott, whom you can trust implicitly.

Judge Bruce, the judge of the middle district of Alabama, died yesterday. There is going to be a very hard scramble for this place. I saw ex-Governor T. G. Jones yesterday, as I promised, and he is willing to accept the judgeship of the middle district of Alabama. I am more convinced now than ever that he is the proper man for the place. He has until recently been president of the Alabama State Bar Association. He is a gold democrat, and is a clean, pure man in every respect. He stood up in the constitutional convention and elsewhere for a fair election law, opposed lynching, and has been outspoken for the education of both races. He is head and shoulders above any of the other persons who I think will apply to you for the position.

I will give you more detailed information regarding other Southern appointments when I see you, which will be within a few days.

Yours truly,

Booker T. Washington.

P. S.—I do not believe that in all the South you could select a better man through whom to emphasize your idea of the character of a man to hold office than you can do through ex-Governor Jones.

No one denies the right of Booker Washington to give advice as to appointments to office in the South. Until the President became a party to what has not unjustly been regarded as factional politics in the removal of an internal revenue officer from his position in Alabama, the appointment of ex-Governor Jones to the bench had every appearance of clear-sighted statesmanship on the part of the President. Now, though, the situation has been somewhat changed, and the expediency of Booker Washington's exercising his indisputable right to advise has become questionable. There is more at stake than the maintenance of Tuskegee upon the practical lines laid down for it by Booker Washington. For it must be remembered that he is one of the field agents of the Southern Education Board, the other being a Connecticut man; that the executive secretary of that board, the Rev. Edgar Gardner Murphy of Montgomery, Ala., is also the principal sponsor for the "child-labor" agitation in Alabama; that Judge Jones has been associated with the Rev. Mr. Murphy in that field, and that the Southern Education Board in its latest publication has taken up the "child-labor" agitation, and though it is unnecessary to deny that there is any direct connection of these different movements through their earnest and sincere Southern participants, the basis for apprehension, which is not likely to be removed through such explanation as that of Booker Washington, is apparent.

Nor will it be removed by such a statement as that recently made in an address before the North Carolina county school superintendents at Raleigh by the Rev. Dr. Wallace Buttrick of New York regarding the purposes of the General Education Board, which is the financier of the Southern Education Board. He said:

We have not for a moment contemplated an independent campaign for education. We have no thought of colonizing Northern teachers at the South, or of propagating Northern ideas at the South; quite the con-

trary, we believe that the teachers of the South must be the people of the South, and that your schools must be organized and maintained by you in harmony with your institutions and traditions; in fact, we have conceived of ourselves simply as silent partners in the great important movement.

In view of conditions suggested in the Booker Washington incident, the statement of Dr. Buttrick was misdirected if it was designed to allay the criticisms of the Southern education campaign, which, indeed, appears to be one of the objects of his Southern sojournings. It has the appearance of an attempt largely to meet a superficial or imagined objection. For we recall no statement of reputable authority that the movement contemplated an independent campaign for education. On the contrary, it was full of promise that the independent campaign of the South for the right education of its whites and its negroes would be checked. Nor was the fear that Northern teachers would be colonized in the South a very widespread or potent one. So, too, it may, perhaps, be said that there was no deliberate thought "of propagating Northern ideas at the South." Such ideas, as far as they related to education, could not possibly be propagated more extravagantly than they have been, and propagated in a spirit shared in the past by some of the originators of the Southern education scheme. The task of the South upon which it was entering when the Southern education scheme was injected was to act upon its own initiative and through its own resources without help or suggestion from outside, no matter how kindly meant either might be, for the extirpation of the ideas which had been propagated to the demoralization of the negro and the hampering of the whites. The curious but unintentional overlapping and commingling of party politics, labor agitation and "educational" campaigning centering in Alabama and their potentialities rather confirm the judgment that the Southern educational scheme is a mistake.

#### MISTAKEN EMOTION.

The child-labor agitation has broken loose in Texas. It has all the earmarks of its origin, particularly scant acquaintance with facts. This appears in an address before the Federation of Women's Clubs by a woman who writes under the name of Pauline Periwinkle. The paper seems hardly the result of original investigation, either in Texas or in the older textile centers of the South. Here are a few specimen statements:

The alarming increase in child labor in the South is due to the removal of Northern mills to the cotton-producing section.

It is a significant fact that the wholesale removal of cotton-manufacturing interests from New England to the Southern States did not take place until stringent labor laws prohibited the employment of young children in the North.

Let Eastern capital invade Texas to the extent it has other Southern States, and our resident mill-owners will be forced by competition to adopt the same methods.

Mill-owners show the same hostility to compulsory education laws that they do to child-labor laws, and use the same tactics for their defeat.

As for the ignorance of country poor whites, it is at least an innocent ignorance. But when that ignorance is transplanted to the inevitably low surroundings of the mill with its evils of profanity, lewdness, drink and cigarettes, conditions are not bettered. The unsanitary horrors that invite disease when people of this class are herded together are unknown to rural life.

Legislation just at this time will also offer protection to the sixteen mills already established in this State presumably by native capital.

The most significant fact about that

address is that if Pauline had, in discussing conditions in the textile centers, observed the same caution as she manifested in the phrase "presumably by native capital," when dealing with Texas, the address would never have been delivered. The rule that should be followed in discussing child labor in the South is, first of all, be sure about your facts.

#### AN ARGUMENT CONFIRMED.

In an endeavor to show The State of Columbia, S. C., that the circumstances of the concerted "child-labor" agitation in several Southern States clearly indicated a purpose from outside to make a stand there for a socialistic propaganda, the Manufacturers' Record warned the South that certain legislation covering specific cases, if persisted in and reiterated, would ultimately establish a dangerous principle in law. In an endeavor to combat that statement The State, though wandering from the main proposition, gives in itself a striking illustration of the truth sought to be emphasized; for it devotes considerable space to prove that South Carolina "at least already stands committed to the principle of labor regulation, and cannot consistently refuse the additional protection needed by factory children." It is no news that there has been labor legislation in South Carolina, as well as in other Southern States. But that is no reason why the South should commit itself still further in that direction. Because mistakes have been made is no reason for making other mistakes. On the contrary, the very fact that The Columbia State points to such precedent mistakes as justification for its advocacy of additional legislation is proof of the ease with which the dangerous principle, against which the Manufacturers' Record warns, may find acceptance among the superficial.

As a matter of fact, is anything that The Columbia State may have to say on this subject worthy of serious consideration? Does The State really know where it stands on this matter, however sincere and ethical its intent may be? For instance, on November 18 it accused the Manufacturers' Record of "attempting to create a prejudice against child-labor legislation in the South by lugging in the offenses, real or alleged, of labor organizations which had expressed themselves in favor of such legislation." Among the offenses charged by the Manufacturers' Record against the labor organizations was the exaggeration and misrepresentation of cotton-mill conditions in the South made by the agents of labor organizations, whether or not they knew they were agents. That charge was intended to indicate the misleading basis of the "child-labor" agitation, and, consequently, its dangerous tendency.

On November 20 The State confirms this view when it breaks forth in a protest against a picture of Southern mill conditions drawn in Mr. John Wana-maker's magazine, a protest which for violence of language has hardly been excelled in this discussion, and which incidentally confesses to the plan of the agitation elaborately explained several weeks ago in the Manufacturers' Record; for, alluding to the author of the latest picture of Southern mill conditions, The State says:

She came here last spring or winter and called at The State office with a letter of introduction from Mrs. Irere Ashby McFadyen, who had been making a tour of the South as a representative of Samuel Gompers, the president of the American Federation of Labor, with a view to arousing public sentiment against the employment of in-

fant children in the cotton mills.

The agitators evidently know upon whom they may rely when they visit the South, and in view of this confession it is no wonder that The State resents others' criticisms of its cronies. But it ought to be consistent. It ought not to call the article of its recent guest "this malicious caricature of Southern mill conditions" or an "utterly inconsequential and unconvincing" outburst. It ought not to complain that "the people of this section do not like to be driven by the lash of lying" or that "the people at the North who really wish to see the elevation of labor in this section should be the last to encourage publications so grossly false in view as to arouse prejudice against the spirit of reforming." The State ought to stand by its friends. If it makes such accusations against them they are likely to retort that the facts of the agitation do not justify The State in calling it an attempt to arouse "public sentiment against the employment of infant children in the cotton mills" or in making its allusion to "that education for which the State provides."

The State knows that infants, in the legal or the popular sense, are not the objects of this agitation. It knows that the State of South Carolina is not equipped to educate properly all the children anxious to be educated, and that there would be a still greater deficiency in that respect had its cotton mills not been established.

If it still wishes to have its fling at competing describers of cotton-mill conditions, let it read the following from its neighbor, the Greenville (S. C.) News:

"Curses, like chickens, come home to roost." We have quoted this proverb before, and more than once, in our efforts to check The State in its ill-advised, unbalanced, one-sided crusade against child labor in Southern cotton mills. We have tried in every way possible to show our Columbia contemporary that it was not necessary to blacken the reputation of all the Southern cotton mills in order to effect needed reforms in the labor system of some of them. We have time and time again pointed out that if our contemporary had become hysterical on the child-labor question, that there was one sure, safe and impartial remedy, both for the alleged evil and for its own mental disorder, and that remedy was the simple expedient of a compulsory educational law. We have more than once had occasion to utter a warning voice against the danger of fouling our own nest within the sight and hearing of that greedy flock of harpies in the North and East, which is ever ready to plume itself with the oil of self-righteousness while assisting in the befouling of anything Southern, and doubly so if that thing happens to endanger the industrial supremacy of its own section.

We must not be misunderstood. We make no charge of disloyalty either to this section or to its textile industry against The State. We feel satisfied that the great and possibly irretrievable injury which it has done the South in general and the State of South Carolina in particular has been the result of bullheaded, uncompromising stupidity rather than of malice—that frame of mind which can see only one thing at a time, and which, in order to take a pawn, is ready to sacrifice a queen. . . . Now, it so happens that recruits have been arriving at The State office so rapidly and their officious zeal has become so offensive to the good people of South Carolina who know the truth, and are galled and outraged by such wholesale perversion of truth, that The State has at last realized that it has too much company, and that its company is overreaching itself and causing a reactionary feeling of resentment against its infallibility. The State now sees what everyone else saw a year ago—that it is not safe to start an agitation against the interests of a home industry, and when the fire has reached a point beyond control, to resume the role of injured innocence and attempt to dodge responsibility, saying: "We didn't intend the little fire we set to spread into such a big blaze."

Perhaps The State has read these words with profit, and gladly reproduced in its columns correspondence



from Columbia in the New York Sun containing the following:

All about, contiguous to and a part of the city there have grown up mill villages owned and administered by the mill managements and consisting each of populations that run into the thousands. For instance, in the village of the Olympia, Granby and Richland mills, all operated by one company, there are fully 10,000 inhabitants, and this little city in itself has all come into being within the past two years. The company owns 500 acres of land, on which excellent dwelling-houses are built—houses that it would be hard to match in any factory settlement in the United States, neat white cottages, all wired and equipped for electric lights, the plumbing and drainage connected with a fine sewer system, and all up to the latest advance in residence sanitation. There are schoolhouses and churches, a fine fire department, a company store where operatives may or may not trade, as they see fit, but where they get a better article for less money than they get elsewhere. The streets are laid with excellent sidewalks and lighted with electricity. The company furnishes free medical attendance to all the thousands who live in the little community, paying regular salaries to physicians, who devote their entire time to the wants of the sick.

And this village is a type, perhaps a type with broader features and better equipped than some, yet a type of the factory communities which are growing up all over this part of the New South, and which are giving tens of thousands of poor white people better homes, better food, better clothing, and, above all, better opportunities for education and intellectual advancement than they or their fathers before them ever had until the dawn of this new era of Southern prosperity and progress.

The State has in the past aided the growth of such conditions. Persistence in its recent attitude might help to turn back time.

#### REASON DAWNING.

The Biblical Recorder believes that North Carolina is coming into her own. It finds the State growing in a thousand ways, and mentions particularly the activity of towns and cities and the educational movement, and it says:

Back of all is the industrial movement. There is new life in North Carolina because there is new business. The mills have stirred the State from border to border and to its very heart in the back country—not only cotton mills, but all manner of woodworking establishments. Each of them gives work to men who found it hard to live in the country on rented land; each brings new population from the backwoods, where it was mostly useless, and gives it place and power for service; each makes a new market for the farmer and the merchant; each increases the income of the State by multiplying upon the value of the raw product, both of men and material; each brings new men into contact with each other and into the region of progress.

"The mills have stirred the State from border to border, and to its very heart in the back country." Yet the efforts of cool thinkers to stem the agitation which would check this stirring of the State by the mills has only recently led the Biblical Recorder to blindfold its brain and unbride its tongue in unjustifiable vituperation of them. But it is beginning to see the light.

On another page of this week's issue of the Manufacturers' Record Mr. Thomas P. Grasty, in correspondence from New York, suggests that President Roosevelt might be aided in his efforts to contribute toward a solution of the negro problem by the appointment of a commission similar in its make-up to the commission now investigating the coal strike. The Manufacturers' Record is convinced that the commission idea has been overworked, and that the appointment of a commission to deal with the negro problem would only complicate that problem. The Manufacturers' Record is in hearty accord with the views expressed by Mr. Grasty on this question except as to the commission idea.

#### A COMPETITOR'S VIEW OF AMERICAN ECONOMIC TENDENCIES.

During a visit in England last summer Mr. Hugh MacRae of the banking house of Hugh MacRae & Co. of Wilmington, N. C., came upon a pamphlet typical of the educational literature which is being distributed in Great Britain and in Germany bearing upon the wonderful progress made in recent years by the United States in manufacturing and in commerce. The significance of this pamphlet, which was written by B. H. Thwaite from the standpoint of a practical philosopher, was deemed by Mr. MacRae so great and the points made in it of such interest to financiers, railroad men, managers of large corporations, political economists, statesmen, and, indeed, to every intelligent citizen of the United States, that Mr. MacRae's house has republished it in attractive form and is circulating it widely.

The pamphlet is a comprehensive survey from the English point of view of American progress and its probable effect upon English industry, and it suggests the means for repelling the American invasion. Mr. Thwaite takes the ground that the iron and steel trades are the best index of a nation's prosperity. He reviews the early vicissitudes of the American iron industry, giving a glance at the efforts made by Great Britain to repress industry in the colonies, and summarizes the reasons of the industrial progress of the United States. This summary really appears in two forms. The most noteworthy of these, especially in connection with the author's statement that the United States had in 1901 secured first place in the output of coal, raw cotton, iron and steel, gold, grain, tobacco leaf and natural gas, is in his suggestion of the remedies for England's plight.

Mr. Thwaite contends that the protective policy, under which American industry has progressed so remarkably, has at the same time produced the strongest and most dangerous enemy to the life of the British manufacturing interests. He points to a realization on the part of British self-governing colonies of the benefits in an elastic form of protection, and recommends as the first line of trading defense a protective or reciprocal tariff policy to provide a link of material benefit among all the components of the empire. This tariff, he says, should apply to every kind of import, preference in duties on raw materials for manufacture and for food being given to products of the empire, and the aim of the tariff should be to make the empire self-supporting. He further advocates the acquisition by a treaty of sufficient territory on the east coast of Africa to enable England to become quite independent of the cotton grown in the United States. Mr. Thwaite's additional remedies are the adoption en bloc by the British government of the American patent system, with a court of experts on the German plan to try patent cases; a radical alteration in British railway methods, imitating the American examples and insuring the Americanization of goods traffic, rolling stock and administration; the adoption of a scheme of education combining the best features of the American and German systems, a thorough reorganization of factories upon the basis of a joint-stock corporation, and a reform in trades-union organization. On this point Mr. Thwaite says:

The trades-unionists are commencing to realize that the labor conditions that could be enforced before the United States entered the arena of competition are not now applicable, and there is in recent statements by

the labor leaders a welcome approach to reasonableness.

No objection can be raised to the federation of labor for its own protection, but when that protection handicaps enterprise and renders it impossible to compete on equal terms for the trade of the world, the capitalist's only alternative to ruin is the removal of his factory to the United States, where he can obtain from his machinery the fullest possible output efficiency.

The trades-union federation, instead of being considered the curse of England and one of the main causes of its industrial and commercial decadence, ought to be transformed into a source of national strength. Instead of discouraging industrial merit, its policy should be to stimulate ability and efficiency, and to assist with all its power in educating its members to an understanding of the conditions most productive of health and happiness.

As bearing upon this particular point Mr. Thwaite quotes some suggestions of Mr. A. B. Balfour, as follows:

That our labor be organized in such a manner that the best workman gets the greatest remuneration.

That industrial thrift and skill shall have their proper reward.

That there be no lack of well-trained and skilled persons in all branches of manufacture.

That those who lead industry in this country—the capitalists, the manufacturers and the managers—show such flexibility, such power of adaptation to the ever-changing needs of the world as to make the best of the great advantages which our physical resources, our natural position, our great traditions and the natural skill of our workpeople have bestowed on us.

Mr. Thwaite believes that unless these remedies shall be speedily adopted Great Britain, competing with the United States, will have lost within less than twenty-five years the steam, hydraulic and electrical engineering industries, the iron, steel and hardware industries, the salt and alkali industries, the textile industries and the boot and shoe industries, while British agricultural industries will suffer proportionately.

The most suggestive feature of this pamphlet is its advocacy of the adoption by England of the policies which have brought the United States to the front—policies against which certain elements in American society are endeavoring to prejudice public opinion. For that reason the reproduction of the pamphlet and its circulation in this country by Messrs. Hugh MacRae & Co. are timely and patriotic.

#### BRIQUETTING IRON ORE.

The Pittsburgh Chronicle-Telegraph announces that the Jones & Laughlin Steel Co. of that city has let a contract for a briquetting plant, which is expected to enable the company so to treat the ore used in its furnaces as to prevent the scattering through the neighborhood of ore dust that has caused complaint. The Chronicle-Telegraph says:

The districts that suffered are among the most populous of the city, and contain hundreds of comfortable and costly homes. The Jones & Laughlin plant is one of the institutions that makes it possible for the people of Pittsburgh to have such homes. If the use of the briquetting process removes the cause of complaint against the furnaces it will give reason for general rejoicing, for the prosperity that is represented by the iron plant will be no longer felt to be a detriment to the prosperity that is represented in the homes.

In addition, it may be suggested that this new process is in line with the progressive policy of adopting every means for obtaining the greatest possible result from plant, fuel and material which is characteristic of all successful American industries.

The Memphis Morning News, commenting on the fact that 400,000 socialistic ballots were cast in the recent congressional elections, says that the South is the last section of the country that

will be inoculated with socialistic virus. Perhaps, but not if the agitation at present centered in "child-labor" agitation is not crushed at once.

#### CAUTION NEEDED.

A bill has been introduced by Senator Lyle in the Virginia assembly providing for the registration of plumbers doing business in cities having 8000 inhabitants and to provide for a board of examination of plumbers. We have not seen the full text of this measure, but as reported it appears to be similar to measures which have become effective in other States. It may be wise for cities to insure sanitary plumbing for the homes and other buildings, but care should be had lest boards of examination of plumbers become virtual dictators of the plumbing business. Experience of other cities should be studied before Virginia cities are committed by wholesale to the policy which seems to be outlined in Senator Lyle's bill.

A consequence of the great international steamship merger, which will bring satisfaction to many men, is the distribution of \$350,000 worth of stock of the new corporation among 225 employees at Baltimore, Philadelphia, New York, Boston, Minneapolis and elsewhere of the Atlantic Transport Co., one of the principal merging lines. Because of the merger about one-third of these employees will lose their positions. To these stock in value equivalent to two years' salary is to be given, and to those who will continue in the employ of the new corporation stock to the value of one year's salary will be given. These gifts are the personal ones of Mr. B. N. Baker of Baltimore, the retiring president of the Atlantic Transport Co. In parting with his employees he has given a notable illustration of the spirit that has animated him in all his dealings with them, and which, deeply reciprocated, has been not the least influence so effective in developing from a local storage and lighterage company a great transatlantic steamship line, adding to Baltimore's commercial fame.

The Charleston (W. Va.) Gazette states that agents of the United Mine Workers are making efforts to renew the strike in the New River region, and calls upon the public generally to discourage the attempts of the agitators and organizers to cause those who want to work to stop and to throw the mines into a state of idleness. It would seem that the United Mine Workers have enough on their hands as a result of their incursion into the Pennsylvania anthracite fields without attempting to make trouble elsewhere. Presently the American people will take the United Mine Workers in hand and teach them and similar bodies a much-needed lesson.

The New Orleans Cotton Exchange has honored itself in electing for the thirty-third time as secretary Col. Henry G. Hester. Colonel Hester's work as secretary has placed him in the position of an authority quoted without question wherever cotton is an interest, and as contributing largely to the standing which the New Orleans market enjoys.

Prof. J. H. M. Beaty, director of the textile department of Clemson College, S. C., makes to the trustees of the college an earnest plea that several machines be added to the equipment of his department to meet the increasing demands.

## THE PRESIDENT AND THE NEGRO.

### A New York View of Recent Manifestations in the South.

By THOMAS P. GRASTY.

[Written for the Manufacturers' Record.]

"During the last few weeks I have heard a number of thoughtful men—of the class who care more for the general welfare than for politics—commending the New York Sun as a safe guide in coming to correct conclusions on the really important question of the hour. And this has led me to read that paper more regularly than for some time past, and the result is that I should be glad to see the New York Sun more widely circulated in the part of the country with whose thought and progress I am most concerned." So spoke one of the most prominent of the many Virginians whom one meets in this city.

It is not at all surprising that men of the kind just quoted should, while sojourning in this head center of "yellow" journalism, look to such papers as the Sun for light on the questions of the hour; in fact, there are localities outside of Virginia—for instance, just across the Potomac—where the Sun ought to be read quite carefully. In fact, there has just appeared in the Sun (evening edition of December 4) an editorial which may serve to help even the President out of his perplexities. In its treatment of all three of the most important questions of the week just passed the Sun has been singularly felicitous. The conclusions it has reached for these three questions will, I venture to say, be considered sound by a majority of the substantial men North and South, be they democrats or republicans.

These three questions have been, first, the President's message; second, the Cullom amendment, and third, the issue presented by a recently-published statement by Senator Pritchard of North Carolina. The first two of these questions will at first be thought to so "outclass" the third as to make it seem a side issue at the present time. But there are some people who already fully realize that upon the final answer which the President shall give to the question raised by Senator Pritchard much more depends than on how far the President meant that trusts should be regulated or on what will be done with the absurd proposition brought forward by Senator Cullom. If the President shall finally decide to sustain Senator Pritchard, the result may be the early disintegration of the so-called "solid South." If he shall array himself against the men who are seeking to eliminate the negro from Southern politics, the "solid South" will so continue until after Mr. Roosevelt's successor shall have been elected.

The element at the South which may be termed the business class looks with favor on any movement likely to eventuate in unrestricted freedom of political thought and action. It was the quiet influence exerted by this class which made practicable the "proclamation" of Virginia's new constitution, which, if it had not been "proclaimed" by the convention, but submitted to the voters for ratification, might have been defeated. That would have meant the continuation of the negro as an obstacle to political freedom, and consequently a continuation of the evil of one-party power.

As has been intimated, the effect of the President's final conclusion as to whether he will lend a helping hand to those who are trying to develop a white man's republican party in the South will be seriously far-reaching. If the "lily-white" element shall be "sat down upon" by the President there is great danger lest the Southern

vote in the next republican national convention will be cast for some other candidate, and as ex-Senator Lindsay pointed out in the Manufacturers' Record of December 4, that would be unfortunate for the business interests of the whole country. If the President were a mere politician looking out for his own interests, there would be little doubt as to the attitude he would be induced to take by this feature of the case. But he is not a self-seeking politician, but a very earnest, conscientious man, with an eye single to abstract justice. In this matter the danger lies in failure to look at both sides. It will be better for the public good if he shall decide not to act too hastily. It will not be inconsistent with his dignity nor at variance with the record he has made as a modifier of premature opinions to await the light which just such utterances as the New York Sun's editorial throws and will cause to be thrown on this question.

Since there are, perhaps, a hundred men to be found in the South who are concerned about the outcome of the issue raised by Senator Pritchard to one who cares particularly about the real significance of the President's recommendations for the regulation of trusts or for puerile measures purporting to be in harmony with those recommendations, it is worth while to quote in full the New York Sun's article on this subject. It is as follows:

"Senator Pritchard of North Carolina differs with the President about the wisdom of appointing negroes to important federal offices in the South. Mr. Pritchard was born in Tennessee, and has always been a republican. His career shows him to be a consistent and a stalwart party man. When he moved to North Carolina in 1873 he became the owner of the Roan Mountain Republican. A Garfield elector in 1880, he was afterward a member of the legislature for three terms, candidate for lieutenant-governor in 1888, in 1894 succeeding Zebulon B. Vance in the United States Senate. Senator Pritchard was re-elected in 1897. Perhaps there could be no better evidence of his devotion to republican policies than his election as president of the North Carolina Protective Tariff League in 1891. It was an uphill fight to make the republican party in the State an influence for useful and responsible government, and the lion's share of the credit belongs to Jeter C. Pritchard. It is doubtful if a Northerner can realize the odds this man had to contend with. Upon the political conditions in North Carolina he must be regarded as a sound authority.

"Experience has taught Senator Pritchard that negroes in office have been a failure in North Carolina. After many consultations with leading citizens who have been brought into contact with them, he has come to the conclusion that to appoint them to office in Southern communities is a policy that not only flies in the face of local sentiment, but arouses violent prejudices which cannot fail to impede the progress of the negro race.

"Mr. Roosevelt's attitude is plainly expressed in his letter to a citizen of Charleston concerning the appointment of Dr. Crum, a negro, as collector of the port. 'So far as I legitimately can,' he wrote, 'I shall always endeavor to pay regard to the wishes and feelings of the people of each locality, but I cannot consent to take the position that the door of hope—the door of opportunity—is to be shut upon any man,

no matter how worthy, purely upon the grounds of race or color. Such an attitude would, according to my convictions, be fundamentally wrong.'

"Mr. Roosevelt held that it was not a question of negro domination, and he argued that 'it might as well be asserted that when I was governor of New York I sought to bring about negro domination in that State because I appointed two colored men of good character and standing to responsible positions—one of them to a position paying a salary twice as large as that paid in the office now under consideration; one of them as director of the Buffalo Exposition.' The comparison is not a just one. In New York's population of 7,000,000 the negro is such a lone figure that by no stretch of the imagination is there any danger of his dominating. The difference between the President and native Southern republicans like Senator Pritchard seems to be this: They oppose the appointment of negroes to offices of trust and dignity because the negroes are manifestly not as fit to fill them as educated white men who might be selected, and because the community resents a preference which neither experience nor conditions justify; the President would appoint a negro to a responsible federal office not because a superior white man could not be found, but because he is a negro and the race should be encouraged. But would Mr. Roosevelt appoint a negro, however capable and worthy—though he might be an intellectual marvel—to the collectorship of Boston?"

In view of the general lack of information at the North concerning the real relations between the white people and the negroes of the South, let us be thankful that so influential a newspaper as the Sun is found taking a position so nearly in accord with the best public sentiment of the South.

If the President be unwilling to accept the testimony of the thoughtful, intelligent and withal patriotic element at the South, then let him do as he did in the case of the coal strike—appoint a "commission." Should he appoint a commission made up of the kind of men now investigating the relations between the Pennsylvania coal operators and miners to investigate the relations between the white people and the negroes of the South, and especially the effect of office-holding on the appointee himself and on the negroes of the vicinage and on the negroes generally, I have little doubt that its report would fully sustain the position taken by Senator Pritchard.

Since the President is committed to the policy of keeping open "the door of hope—the door of opportunity"—to the negro, it is his duty to be sure as to which is that door. With the apparently very dim lights now before him he is more liable to open a sort of "Pandora's box" than the door of either hope or opportunity. Abstract justice is all very well, but there is a good deal in the old saying "circumstances alter cases."

The negro's greatest asset today is the friendship of the white man of the South. Intelligent, prosperous negroes, untainted with the political poison, not only admit this, but look with disapproval on any proposal that may tend to impair that friendship. I know this to be true, and so does every other Southern man. But the average negro is so sensitive to criticism by his fellows, so afraid of being called "a white man's nigger"—a term invented by the idle and thoughtless and often applied with surprising effect—that it is hard to get him to "speak out in meeting" what he really thinks or believes. Another difficulty in the way of bringing the President to see the situation as it is arises from the fact that the negro who stands for what is best in his community—

the negro who has opened for himself the door of "hope and opportunity"—is not the negro who does the talking that the President hears. He hasn't the time to go to Washington. He doesn't even have time to attend the religio-political (if such a phrase be permissible) gatherings like the one at Norfolk a fortnight ago. But if the President should appoint a commission composed of sane, unemotional, justice-loving, truth-searching men to go through the South and find out how best to open and keep open "the door of hope and opportunity," it could, by admitting only one witness at a time, with the assurance that what that witness might say would be treated "confidentially," come to the right conclusion through the testimony of negroes alone—the testimony of the industrious, thrifty element, which is represented by one or more individuals in almost every Southern community.

The phase of the situation which is least considered or understood outside of the South is very clearly presented in the following from the New Orleans Times-Democrat:

"Such appointments are always followed by a singular manifestation of treachery on the part of the blacks, not always, in the latter case, by the black appointee, but by the black race. A post-office is not a private library; a custom-house is not a lady's drawing-room. Each is a place of public business. The moment these offices are occupied by negroes they become a sort of center of magnetic attraction for negroes in the community. The blacks instantly begin to imagine that the custom-house or postoffice in large measure belongs to them. The sense of proprietorship carried to delirium animates the negroes. It is reflected in their manner in public places, in the streets and wherever persons congregate. It tends to make them even more truculent than they naturally are. It disturbs the peace of the community, leads to the violation of law, and costs the whites, in the end, not a little money—not to speak of the humiliation they suffer. It retards the progress of both races. It defeats honest purposes. It spoils well-laid plans. It makes the more difficult and postpones the solution of the race problem. Economically it is unwise. Ethically it cannot be justified."

The editorial from which the foregoing has been clipped was republished in full in the New York Sun of Saturday last, and being a calm, dispassionate discussion of this question, may be commended to the President as a means of increasing the lights before him, and enable him to avoid mistakes in his endeavors to keep open to the negro "the door of hope and opportunity." In this discussion the burden that has been borne and must continue to be borne by the white men and women of the South is pointed out in a way that ought to appeal to the President's love of justice, not merely in the abstract, but what might be correctly called common-sense justice.

The real door of hope and opportunity to the negro is already open, and wide open. It is to the interest of our people to keep it so. It is in accordance with the natural instincts of a brave and chivalric people to give the negro the fairest kind of a chance, provided, always, that the social status remain unthreatened. I know it to be a fact that the white man who takes any unfair advantage of a negro becomes an object of contempt in the South. No more scathingly contemptuous designation can be applied to a man than to say of him that he is "mean enough to cheat a negro." The truth is, men who cheat negroes are socially ostracized in the South, than which there is no punishment more effective short of the penitentiary.

The Waldorf-Astoria,

New York, December 8.



## THE BASES OF EDUCATION.

By JOHN L. WILLIAMS, Esq.

[Written for the Manufacturers' Record.]

In this high noon of our civilization it is required that all mankind shall be enlightened; that all their faculties and powers and susceptibilities shall be awakened, developed, exercised and cultivated, so that men may do skilfully, intelligently, enthusiastically their full part in the business of life; that they may have life abundantly. And that is what we call being educated. As all this is more or less accomplished, we are more or less educated.

The Age of Electricity and the Age of Education are upon us. And, together, they are making a new era. One animates the inanimate; the other quickens the lifeless and arouses the sleeping. Light and Power and Life are their great business.

Both exist for the service of men. And, as they are controlled or uncontrolled by wisdom, they may do unspeakable good or incalculable mischief. And Man, the master, is to maintain his dominion and use their offices under the guidance of the highest wisdom, or be consumed or wasted.

Electricity is a divine thing; its grandeur is manifested in the lightning and the thunderbolt. But its divine origin is recognized as it has been brought down, tamed, and of late years made to do us familiar and pleasant service in the small and great affairs of life. Education, that calls into activity the human mind, is also a divine thing. Prometheus, who brought down fire from heaven, may well stand for the first educator. It was for him to make man know himself and recognize his native dignity, his divine parentage.

The instrumentality and methods that are used to develop man and make education a familiar matter have advanced slowly, and only in later years become common. Our books may well be compared to storage batteries and other suggestors of thought to generators of electricity.

And now, as we are making electricity to do so many things for us in the world of matter, we are calculating to get from education the same kind and amount of service in the world of mind.

Electricity is so much like life that we are almost ready to regard it as life itself. And yet, with all its power and light, it cannot give life. Electricity is not life. And education, with its storage batteries of literature, does so quicken and enlighten the mind and stir the emotions that we almost identify it with wisdom. And yet a man may be educated and not wise. Education is not wisdom; knowledge is not power. Only the education that is based upon wise principles and that leads to the spring and source of wisdom is wise. And the excellency of knowledge is that wisdom distilled from it or reached by it giveth life to them that have it. Wisdom and life are gifts of God. Education and electricity are human means.

Where, then, shall wisdom be found, and where is the place of understanding? The wise man answers to this: The fear of the Lord, that is wisdom, and the knowledge of the Holy is understanding.

Because books contain the records of the acts and thoughts and observations and experiences and knowledge and lives of those who have gone before us, and, by a strange mysterious power, reproduce life and communicate their contents to us, we identify them with education, and regard them as the necessary and unfailing means and instruments of it. And yet the education that uses them only is unsatisfactory.

They indicate realities, but separated

from things themselves, they are the knowledge that puffeth up; little better than vain imaginations. And much study, in that way, is only weariness of the flesh.

The education that promises, that contemplates the wise, useful and happy man and family and nation, is helped by human efforts, but accomplished by the providence of God, by ways, agencies, events, conditions, experiences and trials far above our calculations and defying our scrutiny or imitation. And yet human methods and means and books are very good, and wise men use them in educating themselves and others.

The general world makes great mistakes in its educational methods, and in its superstitious reverence for books and in its unwise use of them. They are like unwise doctors or quacks, that kill their patients by too much medicine and too much doctoring, regardless of the curative and essential power and ready offices of nature.

Education, after a (so-called) scientific system and undertaking, will engage to take the foetus from the languishing mother and assume the place of nature with an incubator. A paidologist, that has never had a babe of her own, will take the babe from the bosom of its mother, supercede nature, and by a scientific treatment manipulate it into childhood. The Kindergarten, with all sorts of imitations of real things, will force a growth and teach and form the little phenomenon that goes for a child, adjusted to all the requirements of educational art, systematizing all its movements and regulating its tears and smiles and frolics; everything by rule and measure. And then the school will take him into its machine, put him through its forms and books and exercises, and at last he is passed on to college to be loaded up, furnished, finished, equipped and accomplished and polished, according to the latest style of the educational fashion-plate. He is branded with a title, and goes forth into the world ignorant of himself, his fellow-man and the responsibilities of life, with benumbed sensibilities, qualified only as a teacher or professor to make the like of himself. And yet he is called educated and cultivated, his very self dead within him.

The world is familiar with such disastrously educated as these; superannuated infants and candidates for the poorhouse, creeping into old age.

Electricity is not life, and education is not wisdom. Both wait on man, and are useful as he is wise. Instruct a wise man, and he will be yet wiser. Electricity and education enlarge and promote the usefulness and happiness of their lord just according to the wisdom that guides him in the exercise of his lordship.

How, then, shall he be made wise to start with, that he may use his gifts and powers and enlarge and lift his life?

We have institutions and teachers and books and means. If we are to rear broadminded, strong, enlightened, skilful, bright and happy manhood, how shall we begin, and on what foundation shall we build?

The wise man says: Through wisdom is the house builded, and by understanding it is established, and by knowledge shall the chambers thereof be filled with precious and pleasant riches.

Lord Bacon says we must follow the way of the Creator, who spent the first day in the creation of Light. So must we, in the making of manhood, spend our first years in the discovery of axioms, maxims and laws and great truths. These bring

after them whole troops of consequences.

The ancients described knowledge as "rerum cognoscere causas;" to know the causes of things—the effects of causes. And along with this they say: Know thyself; that order is from heaven.

To know ourselves is to have the explanation of man's presence here on earth; his parentage, his native dignity, his possibilities here, and the meaning of the profoundest mystery and the most terrible of all facts—death. All that is involved in the knowledge of ourselves. Merely to know the operations of our hearts and minds and bodies is not enough. We find ourselves here, and must know something of the beginning, middle and end of our existence, where we came from and what we are and whither we are going, what sort of beings were our ancestors, and what is to become of our children? Indeed anthropology, including ourselves, is the first thing for us to know, and the conditions of our existence. Ignorance of ourselves and of the dignity and possibilities of our existence leaves us on the level with brutes.

The conditions of our being are truths and laws, fixed and everlasting.

This is the beginning and basis on which and from which our education must work to build up manhood, to make man fit for his lordship; light, a knowledge of himself, of the laws that control all things in heaven and in earth, energized and empowered by the Almighty.

This is like the condition of a child opening its eyes, using its senses, learning to walk—the dawn of the day of life.

To supply all these requisites for opening and rearing rising manhood the world has but one source, one day-spring, where light dwelleth; that is the Holy Scriptures.

There is no other explanation of the mystery of man, nor any other solution of the problem of life. Outside of them we find not even a guess. The words of the Psalmist tell the story. The laws that they reveal are perfect, converting the soul; sure, making wise the simple; right, rejoicing the heart; pure, enlightening the eyes; clean, enduring forever; true and righteous altogether; more precious than all the wealth of the world.

Can all the libraries of the earth, can all the range of human knowledge produce a record, a revelation, a book, an agency with light and life-giving power suggestive of the Word of God? Man is entitled to that, and has it.

The myths of the ancients could tell only of a Pierian spring, of Sybilline leaves, of remote fountains, of Oracles—all hopeless frauds. And all their philosophy was pitiful gropings after the truth. Such are the bases of manhood that classic education offers.

The Holy Scriptures give us as a foundation of the structure of manhood and bases of education everlasting truth and divine manhood.

As the most authentic account of man, they are entitled to the first place. Anthropology has no textbook or authority comparable to them.

The Ten Commandments are the first principles of self-government and sociology.

As mirrors of human character, their biographies are true and their phases of life myriad-minded.

Briefly in their histories of nations they illustrate the great lesson: Righteousness exalteth a Nation, but sin is a reproach to any people.

Their principles, maxims, laws, proverbs and precepts are not only those that govern the individual and society, but they are the laws that underlie and are identified with all the laws that govern men and things in the natural and spiritual world. As such they prepare the heart and mind of man for the knowledge and

appreciation of all science, and they point the way to knowledge and skill in all the departments and business of life, and to the highest and largest development of manhood.

Moreover, they are the underlying principles of all literature—the standards, exemplars, tests, imparters of good taste and excellence in all things; the weights and measures of value. They inspire the love of all that is good and true and beautiful.

They form, strengthen and establish character. And they furnish the mind, memory and imagination with the very highest conceptions and images to be found in all literature, or that are possible for man. The Manhood that is founded, reared, braced and made up of Scripture truth and life and wisdom is ready for the highest excellence in every art, science or calling. It is saturated, strengthened and enlightened for all work, after the likeness of Him who is wonderful in counsel and excellent in wisdom.

It is most strange that such a book of history, philosophy, high literature and wisdom as the Bible should have no place in most of our school and college courses.

The Free Schools are for the most part run on principles of Freethinking and Godlessness and Demagoguery. And but for the piety of individual teachers they would be nurseries of irreligion.

The fundamental Truths and Principles of our Civilization (which is Christendom) are the Teachings of the Holy Scriptures, and they are the bases of wise education. Christianity is not a mere matter of opinion, a mere historic fact or a result of reason and observation. It is the revelation of the Great Creator; it is a great overwhelming fact. Its light is as the Sun's, the light of the world. Its presence and influence is no more to be questioned than the light of the Sun; nor the credentials of its Author any more to be asked than those of the great luminary. He is before the world as the Sun of Righteousness with healing in His wings. The difference between Christianity and human Philosophy is that between Solar and Terrestrial light and heat. One is from heaven and life-giving. The other is of the earth and earthy. Higher criticism can no more affect Bible Truth than Astronomy can affect the Sun's spots and its power. I venture to offer my observations to the Manufacturers' Record, because they are as practical and real as anything you care for; because Religion is as necessary to life as Gravity is to the Physical World.

### Protest Against Agitators.

In a letter to the Manufacturers' Record Mr. C. J. Edwards, owner of the Meridional of Abbeville, La., writes:

"I desire to congratulate you upon your valiant and vigorous attack upon those wily Northern agitators and schemers who, under different specious pretexts, are endeavoring to hamper and cripple Southern manufacturing.

"The child-labor bill is only one of the cards these clever schemers hold. There are more up their sleeves.

"In this connection permit me to call your attention to an article in the December Everybody's Magazine by Marie Van Vorst. It is, to say the least, a very unfair, if not slanderous, attack upon the Southern cotton-mill management and operatives.

"The day of Uncle Tom's Cabin campaign literature had passed, I hoped, never to return."

The board of directors of the Jamestown Exposition has decided to raise a guarantee fund of \$500,000 through an issue of stock, and members of the board has already subscribed to \$113,000 of the stock.

### GEORGIA CANE.

#### Business Men of Waycross to Develop Its Growing.

[Special Cor. Manufacturers' Record.]  
Waycross, Ga., December 6.

As the record of your valuable paper attests, and your indefatigable and continued efforts for the welfare and up-building of the South demonstrate most positively your faith and interest in all things that are of benefit or that bid fair to become of profit to this section of the country, I feel satisfied that you will be pleased with the following information and may possibly be able to use some of it to advantage in one of your articles.

Recent agitation of the sugar-cane question in this portion of the South, incident to the United States government becoming interested in the extraordinary fine cane grown in South Georgia and establishing an experiment station here at Waycross for the purpose of testing the sugar and syrup producing qualities of the cane grown in Ware county and adjoining counties, has not only created considerable activity among the farmers, who have heretofore planted only sufficient for home consumption, but has also attracted the attention and aroused the interest of our most substantial business men on this subject, as is evidenced by the following paragraph:

"On the 20th of November, this year, at a meeting held in the rooms of the Chamber of Commerce in this city, a co-partnership of ten of the most prominent business men of Waycross was formed and organized under the corporate name of the Waycross Cane-Growers' Association, for the purpose of buying or leasing land and engaging during the year 1903 in intensified cane-growing and the making therefrom of syrup or sugar, or the replanting of the entire crop for another season, as may be found most desirable at the time of harvesting."

It is generally believed that this Cane-Growers' Association will prove and demonstrate beyond any doubt the great possibilities, from a financial standpoint, that exist in the growing and culture of sugar-cane and the manufacture of sugar and syrup in this country. This association is composed of W. A. Price, president; J. Mitt Wells, secretary and treasurer; Geo. R. Youmans, W. W. Sharpe, Jas. S. Bailey, W. J. Smith, L. K. Morris, C. I. Allen, W. P. Little, C. E. Murphy and J. M. Cox.

This movement upon the part of the business men of Waycross is bound to accomplish two very satisfactory results—i. e., it will prove an exceptionally well-paying investment to those interested, and at the same time exhibit to the farmers that the planting of sugar-cane and the careful culture of same as "a money-making crop" has possibilities equaling, if not exceeding, those of any other farming industry, and at considerable less expense and attention.

Ware county, Georgia, of which Waycross is the capital, probably grows the finest and best sugar-cane in the entire South, which claim is in a large measure substantiated by the public statement of Dr. G. L. Spencer, chief of the sugar laboratory, bureau of chemistry, United States Department of Agriculture, who, when shown a sample of the cane grown in Ware county, ten feet long and weighing from six to eight pounds per stalk, said: "They are as fine as any sugar-cane I have seen in the tropics." The average growth of sugar-cane in this county is 25,000 stalks to the acre, and the average yield in syrup from 600 to 700 gallons, which is selling right here at forty cents per gallon, put up in any kind of package available; hence, if put up in a neat, uniform package, with an attrac-

tive label, would undoubtedly bring from fifty cents to sixty cents per gallon wholesale. From these figures and facts, which can be verified, it can be readily seen what magnificent and valuable prospects there are in the immediate future for the sugar-cane and syrup industry in South Georgia, and particularly Ware county.

Georgia syrup has already obtained a most enviable and almost national reputation, and the time is fast approaching when it will rival and surpass the now famous maple-sugar syrup, as at present the demand largely exceeds the demand for Georgia syrup, although within the last two years there has been more syrup made for sale than ever before in the history of this State. There is but little doubt that the making of the sugar and syrup is soon to become one of the chief industries of Georgia, as the net value of this product as compared to the capital necessary to invest will be a "profit eye-opener" to the entire country.

The Waycross Chamber of Commerce is at present fostering and encouraging the sugar-cane industry, but the prospects are that it will soon take care of itself, and there is now, or will be in the next few months, the finest opportunity for a sugar refinery, syrup manufactory and canning factory that could be imagined, as it is generally believed that this industry will grow to such proportions as to necessitate handling in the same manner cotton is now—i. e., the farmer will cut and bring his cane to the syrup factory, where it will be ground and boiled for sugar or syrup and delivered to the refinery or canning factory, and delivered back to the farmer in neat packages and under attractive labels and ready for the market.

J. MITT WELLS,

Secretary Chamber of Commerce.

### Cane Syrup in Georgia.

#### Editor Manufacturers' Record:

Let me draw the attention of your many readers to one item of Georgia's neglected money-making crop, sugar-cane syrup. Here is an article that we have been making for more than 200 years, yet we are not in the world's market with this most excellent article for food. Why is this? The only reason I can see is that the Southern land has of late years been paying attention to cotton, lumber and naval stores. The last two have seen their palmy days and are on the decline. There is no use trying to hide the fact. Our yellow-pine forests are fast disappearing before the woodman's axe; the young forest is being cut into railroad ties and the younger saplings are being destroyed by fires. Yet we have the soil and climate left—a climate that is hard to beat even in sunny Italy; a soil that will, with ordinary care, produce most anything that can be grown in any other part of the United States.

In April, 1901, the Board of Trade of Brunswick, Ga., called a convention of farmers and others to discuss sugar-cane and cassava. Samples of both products were shown, able speeches were made, and from that convention sprang a new interest. The Georgia legislature was appealed to for help to establish experiment stations. But no, the boasted Georgia long-sweetening had no friends there. There was a higher court. Secretary Wilson of the Agricultural Department at Washington was appealed to for co-operation, and we got it, for with him there was no North and no South, but a United States, and through him and our representatives at Washington we got \$20,000 to make experiments in growing cane and in producing a better article of table syrup. These experiments are being ably conducted in various parts of

Georgia and Florida. The Washington experts declare that we have a glorious future in this one article of food, a pure and healthy table syrup. When Secretary Wilson was at Brunswick attending the last cane and cassava convention I put the question to him whether a table syrup could be made from the sugar-beet. His reply was that the chemical action and reaction in making sugar from beets destroyed any chance of producing a table syrup, and that Georgia and Florida held the field entirely.

Here is a source of wealth that we have failed to develop. Why should it be so? It is not my intention to go deep down into the whys and wherefores, but I will say that a mine of wealth is lying here. It has been proved without doubt that our Georgia cane syrup, properly made, can be sent to any country in the world. I, myself, have sent syrup made on my place on a voyage by steamer of 6000 miles, and it stood the test splendidly and to the entire satisfaction of the Brunswick Board of Trade. The commercial man asks whether there is any money in the business. I say, without fear of contradiction, yes. There is a demand for a purer and better refined article. There is as safe investment in this line as in any other legitimate branch of business, and I hope to see the day when syrup shall be shipped by the cargo from our ports.

J. M. JARDINE.

Nicholls, Ga.

### In the Birmingham District.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., December 8.

There is very little change in the market situation over last week save a little less number of inquiries and the report that some iron has been sold for less than \$19.50. There has been some iron sold for the last half of next year during the last few days, however, and other contracts are pending so far as one can hear. Mr. F. A. Burr, general sales agent of the Tennessee Coal, Iron & Railroad Co., with headquarters in New York, has been in the city for a week, and seems greatly pleased with the outlook. He said there was no great things in the way of inquiries, but he supposed this was caused by the knowledge that there was nothing to be had for some months to come. He said two gentlemen who were out looking for iron came down from New York last week thinking that they could stand a better show by appealing personally than by writing or telephoning. He understood they got a few cars of spot by paying fancy price for it.

An interesting report that seems to have earmarks of truth concerns the prospects of two new furnaces in this district. Parties from Pennsylvania are coming to look over the prospect. Some coal lands known to be rich are in the deal, and this much is a fact—the men interested have the money. The young man who is engineering the deal was for a long time identified with one of the largest industrial companies in the district, and is of the same family of one of the biggest men in the iron-making world. Many of those who keep posted on such things believe the new scheme will go through.

Work is being pushed on the ovens and foundations for the plants of the Valley Iron Co. near Fort Payne.

The Republic Iron & Steel Co. will soon have 910 ovens in blast, that being the number with those now getting in shape at Thomas.

A plan to build a big \$500,000 cotton mill in one of the new small towns near Birmingham will soon be set on foot.

The rolling-mill situation is not quite so strong as last week, there being a slight falling off in demand for products from

that class of enterprise. The dullness is no doubt caused by the end of the year.

Mr. C. A. Stillman, local manager for Rogers, Brown & Co., has just returned from a trip to Cincinnati. He comes back well pleased with the outlook. He says that while there has been some talk of dullness incident to the close of the calendar year, his company has not found it so to any great extent.

The lack of cars to handle the iron and coal outputs of the district is still serious. On some of the furnace yards in the State there are thousands of tons of iron that cannot be moved. The Louisville & Nashville has gotten somewhat out of the hole, and has modified its recent order not to take any switching business, so that all stuff perishable can be handled. The other lines are not doing so well.

H. W. L.

### The Iron and Metal Trades.

In its review of the week the Iron Age says:

"Our monthly blast-furnace report reflects the peculiar conditions which affect the local branch of the industry. A very considerable number of furnaces have started, chiefly in the districts affected by the anthracite coal strike, but the November product was not up to the normal, because of the continued trouble with the coke supply. Our coke and anthracite iron capacity is now up to 336,617 tons per week, an increase of about 6500 tons per week over last month. There is little doubt that if the furnaces had a chance to run full throes now in operation could make close to 350,000 tons per week, which would be above the record.

"As it is, the steel works notably are short of metal, and it appears that some of the larger plants east of the Alleghany mountains have purchased round lots of foreign Bessemer pig for early delivery at about \$20.25, ex-ship, duty paid. There has also been purchased quite a fair tonnage of low phosphorus pig. On the other hand, importers of foundry iron have done very little in European markets lately, and are holding off, the result being a further weakening of values. Thus Middlesborough No. 3 can now be sold at a profit in cargo lots at \$17.75 cash.

"In the domestic market the feature of interest is the resumption of negotiations between the leading interest and the Bessemer Association, which have not, however, led to anything as yet. Some moderate lots of Bessemer pig have sold at Pittsburgh, and a good tonnage of basic pig has been placed with Eastern consumers in foundry iron. Chicago notes a shortage of malleable for prompt delivery, but on the whole the markets are quiet.

"The selling of foreign billets has been resumed, and we can report transactions in 1000 and 2000-ton lots, chiefly for Atlantic coast delivery, aggregating about 10,000 to 12,000 tons. It is worthy of note that the German steel works are engaged in negotiations to place the export sales of steel in the hands of their syndicate, which makes the sales of steel for the domestic market. This has already strengthened the market, and today the lowest figure named for German steel billets, ex-ship, duty paid, is \$26.75 to \$27.

"The rail mills have now accumulated orders for next year to the extent of 1,800,000 tons, to which must be added the amount of orders which will be carried over from this year, a quantity on which estimates vary. Importers are in receipt of some round inquiries, both for domestic and Canadian account.

"The structural mills continue to receive good orders, among those recently placed being 12,000 tons for a bank building in Chicago. The plate trade is congested with work. A meeting of the manufacturers is to be held in this city, at which the percentages of participation for next year will be discussed.

"Very good accounts are being received of the sheet trade, and the bar mills seem to be doing well. The sheet trade, however, is still in rather a poor condition, and prices are suffering."

The North German Lloyd Steamship Co. has established a direct line of steamers between Savannah, Ga., and Bremen, Germany. The first steamer to arrive at Savannah was the Coblenz.



**GULF OYSTERS AT MOBILE.****Efforts to Protect and Advance the Industry.**

[Special Cor. Manufacturers' Record.]  
Mobile, Ala., December 6.

One of the matters to receive attention at the hands of the next legislature from Mobile county is the enactment of laws to protect the oyster industry. The oyster business of Mobile is no small matter, as many persons gain their livelihood in that way. It was a surprise to the writer to see the large fleet of vessels bringing oysters to Mobile for local and foreign consumption. It was ascertained that at least forty vessels came into port during a week. On each vessel from 100 to 200 barrels are brought. They are disposed of largely to wholesale dealers, though many are sold to small dealers. The market is said to never be dull, as the demand is always equal to the supply. With such a growing industry there is no legislation to protect their interests. With the proper protection by providing good laws they could be made a source of good revenue to the State. A movement is on foot by which the local representatives in the general assembly will be asked to provide laws whereby "pirates" from other States will be prevented from coming into this territory, buying oyster from the catchers on the reefs and taking them to other towns on the coast and there disposing of them. Few have as yet realized the importance of such legislation, but when it is known that the oyster beds of Alabama waters are being rapidly depleted they will see the wisdom of necessary legislation along this line. The movement looking to the better protection of the oyster beds in Alabama waters is growing rapidly, and some legislation should be had not only looking toward protecting the beds, but to providing a substantial revenue to the State.

Mobile's recent great progress and extraordinary increase in all branches of business is largely due to improvements made by the government in the channel in giving a depth of twenty-three feet from the Gulf to the wharves. Mobile ranks third in the imports of tropical fruits. It also handles almost the entire sisal crop of Yucatan.

I. S. FIELD.

**WORKING FOR MONTGOMERY.****Task of the Commercial and Industrial Association.**

[Special Cor. Manufacturers' Record.]  
Montgomery, Ala., December 8.

One of the most progressive organizations in the South is the Commercial and Industrial Association of Montgomery, Ala. It believes implicitly that it has a good thing, and it keeps pushing it along. Mr. L. L. Gilbert, the efficient secretary, is always on the alert, and many of the industries recently started or being located in this city are due to his efforts. About as soon as they have one new plant located they start on the lookout for another, and thus the good work goes on. When this organization is required to donate a site or subscribe capital it has a membership which does not hesitate to meet all requirements or demands. That enables it to be successful. It recently secured the location in the city of a large stave factory and planing mill, which will represent an investment of from \$35,000 to \$50,000 and will employ from fifty to seventy-five hands at the beginning. This plant will be owned by Messrs. Robert Nixon & Co., whose office is at Florence, Ala., and who will move the plants at Iron City, Tenn., and Cordova, Ala., and consolidate both at Montgomery. They will manufacture staves for foreign shipment. They will also manufacture all classes of hardwood lumber for interior and export markets, flooring, ceiling, sid-

ing, etc. All will be made even-jointed, nail-set and ready to be used without alteration. It is this firm's intention to get out from 25,000 to 30,000 feet of lumber per day, and the stave and planing mill will be in addition. For raw material they will use cypress, oak, ash, cottonwood, poplar, magnolia, hickory and gum, while in the planing mill pine will be used. A location has been secured for them upon the river, so that they may avail themselves of both rail and water. They will raft logs up and down the river. The association arranged a site of five acres for them between the river and the Louisville & Nashville Railroad, which is owned by that road, and which was leased for a period of ten years. When all negotiations were closed Mr. Nixon said what he was unable to do in three weeks in a neighboring city the Montgomery Association accomplished in two hours.

Whilst the association is a factor in the development of the city, Montgomery possesses many admirable advantages which should appeal to manufacturers generally. It has advantages over some sections of the country which manufacture everything from a pin to an engine. It has a climate in which work can go on every day in the year. Skilled mechanics can be secured readily and cheap material is at hand. The success of one manufacturing concern will be an inducement for others to locate until Montgomery shall be a big manufacturing city.

Mr. W. B. Davidson, chairman of the advertising committee of the association, has compiled the material for a handsome pamphlet on Montgomery, which will be shortly issued, and which will have an edition of 10,000 copies. He claims it will be the finest booklet ever sent out in Montgomery.

I. S. FIELD.

**Opposed to Street Fairs.****Editor Manufacturers' Record:**

One of the most useless and senseless customs in the South on the part of some cities is the observance of an annual street fair, or what is more generally known as "merry-makers." Instead of being helpful to a city's growth, these fairs are detrimental. I have learned the object is to increase business, but how it can do so is a conundrum to me. The writer visited Durham, N. C., during the last street fair, and it is true the streets were crowded and almost blocked with people. But they were not patronizing the retail stores, as was expected, but were congregated about the fakirs and gamblers who were busy raking in their hard-earned dollars in a game of chance, with the only possible opportunity of winning being in favor of the dealer. These glaring schemes of gambling were run in full view of everybody, licensed by the city and largely patronized by the young men, which, to say the least, is a state of affairs which is not very helpful to morals.

The principal shopping streets in that city were filled with a boisterous set of hoodlums standing on the curbstone, and I, with many other strangers in the city intent on business, were pelted with rubber balls for almost a square, and the police stood off enjoying the so-called fun. When I spoke to the captain of police he remarked that it was a great nuisance, but he could not prevent it. Two of the retail merchants told me that if this state of affairs continued much longer they would be compelled to close their doors until the affair was over. How this sort of thing is a business promoter is too hard for any sensible man to answer. I agree it promotes and helps the fakirs, who, like a circus, carry off available cash from the town, but I cannot see how it can help a town or the merchants doing business there. Furthermore, where

gambling is tolerated openly there can always be found a number of globe-trotter crooks and pickpockets who are intent on mischief and depredations, and a fair brings to these towns a population of this kind, which is not very desirable. The Augusta Chronicle, after the close of the street fair this year, congratulated the police force for the good and efficient work they had done in keeping down crime during that event, and regretted that there was no extra pay for longer hours of work necessitated by the so-called business promoter.

If the merchants in the cities where these fairs have been held would patronize their daily papers more than they do and arrange attractive and readable advertisements in those papers, the country people would be much more interested and attracted in what the merchant would offer, and in the long run it would prove to be more profitable to all concerned.

I. S. F.

**The Inland Waterway.****Editor Manufacturers' Record:**

At a recent meeting of the Business Men's Association of this town Congressman John Small of North Carolina, the champion of the inland waterway from Baltimore, Md., to Beaufort Inlet, N. C., addressed its members in behalf of the project. The ideas and arguments he presented were forcible and convincing. His plan, in short, is to provide a channel by way of the North Carolina sounds and canals of eighteen feet in depth between the points above mentioned, in order that small sailing vessels and barges may be utilized in the coastwise traffic from Florida north. No tolls will be collected. Today the dangers of Capes Lookout and Hatteras and the high rates of marine insurance they impose prohibit the use of small sailing vessels and barges, which are the cheapest modes of transportation that can be utilized. The undertaking, he noted, was exceeding great, but with the facts and figures behind it and the right men at the guns he feels confident of success.

The president of the association was authorized to appoint a committee of three to look up such data as was desired by Mr. Small. Immediate steps will be taken along this line, and a complete readable report will be handed over to him by December 15.

The waterway will be of great value not only to Edenton and North Carolina, but to the entire South Atlantic coast, and every effort should be put forth by the people of the South toward aiding Mr. Small and his associates in the undertaking.

LAWRENCE McRAE.

Edenton, N. C.

**For a Metal-Tie Plant.**

J. Stanley Wright & Co. of York, Pa., write to the Manufacturers' Record as follows:

"We are looking for a location to establish a plant to employ from 200 to 500 men in the manufacture of a metal railway tie. After consulting many of the chief engineers of the leading railways we find the article practical and salable. The next thing is a location where raw material may be had in abundance and with good shipping facilities."

Contract has been awarded to C. H. Moore for the construction of the Round Lake drainage canal in Mississippi county, Arkansas, a distance of twenty-six and one-half miles. This canal will drain 115,000 acres of lands now under water or swampy, but heavily covered with merchantable timber. The clearing of this timber will open up a rich section for agriculture.

**THE APPALACHIAN RESERVE.****Its Practical Value from the Lumberman's Standpoint.**

Mr. Henry B. Stevens of Asheville, N. C., one of the incorporators of the Alleghany Land & Lumber Co. of that city, writes to the Manufacturers' Record as follows:

"Your paper is doing more for the development of the South than the entire press of the country. It is impossible for one not on the ground and not familiar with the local conditions to realize or ascertain how rapidly the timber lands of Western North Carolina and East Tennessee are being taken up by Eastern capital. Varieties of timber heretofore considered practically worthless command a good price; for example, the bark from chestnut oak is being purchased for tanneries in vast quantities, and the limbs and twigs of the ordinary chestnut trees are being hauled to factories or plants now in course of construction, to be manufactured into tannic acid for dyes.

"On a recent trip over the South & Western Railroad, now being constructed from Johnson City, Tenn., to Lincoln, N. C., and now operating trains from the former point to Tocaie, in Mitchell county, North Carolina, I observed along the route in Mitchell county quantities of walnut stumps and roots dug up many miles away in the forests and hauled to the railroad for shipment to distant points. The walnut trees have long since been cut out, and now even the stumps and roots are in demand. If the Appalachian Park bill should become a law many beautiful forests in this section would be saved, but the establishment of a national forest reserve need not interfere with the lumber business, as, after the large trees have been cut under proper rules of forestry, the forests will remain compact and a sufficient protection against floods; but as lumbering is done now, with no rules or regulations, it will only be a decade or two until the mountain slopes will be practically robbed of their chief adornment and protection to the residents in the valleys below against floods. There is no reason why Congress should not, and every reason why it should, establish a national park or national forest reserve within the territory proposed and recently published in your esteemed paper."

**Viewing the Oil Situation.**

Mr. Albert Phenix, special representative of the Manufacturers' Record, is in the city for a few days for the purpose of securing material for an extensive article on Beaumont and the oil industry, which will be published in the Manufacturers' Record. Mr. Phenix is particularly fitted for writing such an article, and the oil industry and the city can be well satisfied that what Mr. Phenix writes will be the result of careful investigation and a definite understanding of the things of which he writes. Mr. Phenix was here during the early days of the oil development, and those who read his articles in the Manufacturers' Record will readily recall that they were among the most complete and conservative stories told about Beaumont at that time. Mr. Phenix does not intend to go very far into the details of the situation here now, but will write of the great fuel-oil industry as it is centered in Beaumont. He says there is a great deal of pessimistic talk going on over the country concerning the Beaumont field, and his paper conceived it very appropriate to make a study of the situation here at this time and publish a conservative and truthful story which would be appreciated both by those interested here and others who may have prospects of investing here.—Beaumont Journal.

**MIDDLESBORO COAL.**

**One of the Richest of the Appalachian Fields.**

The region at the headwaters of the Cumberland river has lately awakened to realize that it possesses one of the richest coal fields of the Appalachian mountains. The Cumberland and Pine mountains, with almost unbroken crests, have long isolated this southeast corner of Kentucky and the adjacent part of Tennessee. A few years ago a tunnel was driven under the historic Cumberland Gap, and now a single district near Middlesboro is furnishing 600,000 tons of coal annually. The last year has seen new mines opening in this district and old ones enlarging, and long switches now building will soon open up new districts and reach new mines. Railroad surveying parties have been active all summer. One line has been run to Harlan, the county seat of Harlan county, and right of way obtained for it. Thousands of acres of coal lands have been purchased in Harlan and Bell counties in the last few months, and many districts are only awaiting the building of the railroad to begin active mining operations.

With its usual foresight, anticipating the needs in such a case, the United States Geological Survey, working in co-operation with the Kentucky State Survey, has had a geologic party in this field the last summer. This party, in charge of Dr. George H. Ashley, geologist, has traversed all the portion of the field likely to be reached soon by railways. The work has consisted in making out the general structure and stratigraphy of the field, but more especially in a detailed study of the coal beds, to determine their number and the facilities with which they can be worked, their relative position to one another, to sea-level, and to the adjacent drainage; the details of each bed as to thickness, partings, roof, floor, extent and dip through the mountains, and the correlation with other beds. Large numbers of the coals were properly sampled and analyzed, and hundreds of photographs taken. New maps of the area are being prepared on which to show the extent and position of each of the workable coal beds. The government expects to publish the report of the work as soon as it can be properly prepared.

**Birmingham.**

"Birmingham, Ala.: Its Resources and Advantages" is the title of a pamphlet published under the auspices of the Commercial Club of Birmingham and condensing into handy form a mass of information regarding the attainments of the city and its great possibilities. The pamphlet shows that of the 162,920 population of Jefferson county 98,250 are in Birmingham and nearby cities and towns; that the bank deposits of Birmingham have increased from nearly \$6,000,000 to more than \$9,000,000 between 1898 and 1902, and its bank clearings have more than doubled during the past five years, and that improvements and investments made by municipalities and corporations during the year ended May 1 last represented \$20,944,818. An interesting feature is a suggestion of industries which would pay there, and Mr. J. B. Gibson, secretary of the Commercial Club, is prepared to furnish detailed information in addition to that given in the pamphlet.

**The Norfolk Section.**

The Virginian-Pilot of Norfolk, Va., publishes some interesting figures compiled by Secretary E. E. Daves of the Board of Trade showing that in Norfolk, Portsmouth and Berkley there are 596 manufacturing establishments, employing

6674 persons and paying out annually \$2,540,426 in wages. The aggregate capital in these industries in the three cities is \$9,345,162, and the value of their products \$14,643,400. Between 1890 and 1900 the number of factories in Norfolk increased 19 per cent., their capital 88 per cent., and the value of the products 84 per cent.

**Texas Corporations.**

During November seventy-one charters were filed with the secretary of State of Texas, representing an aggregate capitalization of \$9,510,300. But three of the corporations had a capitalization of \$1,000,000 or more, the others ranging from \$500,000 to \$600.

An article by Mr. John W. Hays, a civil engineer of Petersburg, Va., on the determination of the power of streams, which appeared a few months ago in the Manufacturers' Record, has been reprinted in Bulletin No. 47 of the irrigation papers of the United States Geological Survey. Mr. Hays' specialty is the determination of the power of streams, and the reprint of his paper by the government for distribution to persons interested in hydraulic development is a gratifying tribute to the merits of his methods.

F. L. Bossut, No. 30 Rue du Pelican, Brussels, writes to the Manufacturers' Record that he is seeking information about American machinery for the manufacture of cardboard boxes and for the manufacture of busts, stands and shop outfits in general, together with dust and shavings collectors. He also writes that a friend of his, G. L. Massart, No. 14 Rue de la Paille, of Brussels, is open for the agency of American products requiring no stock.

The St. Louis & San Francisco Railroad Co. has been incorporated in Mississippi to comply with the State law. The Natchez & Southern Railway Co., which is the same as the New Orleans & Northwestern in the Gould system, has also been incorporated in Mississippi.

The Yazoo & Mississippi Valley Railway Co. (Illinois Central) has purchased for \$200,000 property at Memphis occupied by the Merchants' Cotton Press & Storage Co.'s largest warehouse. It is rumored that the company may use the property for a new freight depot.

Greenville, S. C., has \$3,510,000 invested in its textile industries and \$500,000 in those in course of construction, while \$800,000 represent extensions and projections for the coming year.

It is estimated that next year's output of coal in Alabama will be more than 11,000,000 tons. The use of coal-cutting machines is increasing, and many new mines are to be opened.

P. N. Constantopoulos of Athens, Greece, writes to the Manufacturers' Record that he would like to get into communication with American manufacturers of fancy and black cloths.

The sales in the Joplin (Mo.) district during the week ended December 6 were 8,226,970 pounds of zinc ore and 1,479,640 pounds of lead ore, valued in all at \$159,569.

The Wrightsville & Tennesse Railroad Co. has placed an order with the Baldwin Locomotive Works for one new freight engine for delivery next October.

The lumber industry of Columbia, S. C., has increased in capitalization in five years from less than \$10,000 to \$135,000.

The output of Virginia coal mines in 1901 was 2,725,873 short tons.

**RAILROADS.**

[A complete record of all new railroad building in the South will be found in the Construction Department.]

**HAS EXTENSIVE PLANS.**

**Survey Begun for the Oklahoma Central & St. Louis—Big Terminal Project.**

Mr. W. S. McCaull, president of the recently-incorporated Oklahoma Central & St. Louis Railroad Co., writes from Kansas City to the Manufacturers' Record stating that the company has organized by electing officers as follows: President, W. S. McCaull; first vice-president and general attorney, J. G. Trimble; second vice-president and treasurer, J. J. Collister; secretary, Louis Underwood, all of Kansas City, who, with H. E. Hopkins of El Reno, Okla., form the executive committee.

"We now have an engineering corps in the field," writes Mr. McCaull, "making the permanent location, and hope to have the contractors at work on the grade before the new year."

The company proposes to build about 600 miles of line in Missouri, Indian Territory and Oklahoma.

Concerning the Central Oklahoma Union Depot & Terminal Railroad Co., which was also recently chartered, Mr. McCaull writes: "This company intends to build a union depot, belt line and terminals in Guthrie and Oklahoma City, Okla., connecting those two cities with all of the other adjoining counties where there is not now a direct line of railroad, furnishing terminal facilities in each of those cities for other roads now built whose terminals are not sufficient, and to induce all new roads building in that direction to use the union depot. They are under contract to the Oklahoma Central & St. Louis Railroad to furnish them terminals in each of those cities. Their charter also provides for building union depots and terminals in any other city, and it is probable that a union depot will be built by them in Carthage and Joplin.

"The officers of the Union Depot & Terminal Railroad Co. are: President, W. S. McCaull; first vice-president, J. G. Trimble; second vice-president and treasurer, J. J. Collister; secretary, Louis Underwood, all of Kansas City, Mo., and general attorney, C. Porter Johnson of Oklahoma City; executive committee, J. C. Robb, Kingfisher; Chas. E. Billingsly, Guthrie, together with the president and second vice-president.

"The company is capitalized for \$5,000,000, all subscribed, and expects to build about 200 miles of terminal tracks."

**ARMOUR AND SWIFT DEAL.**

**Union Depot, Bridge and Stockyards Proposed at Kansas City.**

J. Ogden Armour and Gustavus F. Swift have purchased control of the Union Depot, Bridge & Terminal Co. at Kansas City, of which Theodore C. Bates was until recently the president. He has been succeeded by George H. Ross of Chicago, who was for several years traffic manager of the Indiana, Illinois & Iowa Railway.

It is stated that the plans of Messrs. Armour and Swift are to build a new depot to be used by a number of the leading railways, and possibly two bridges across the Missouri river. They have 3000 acres of land on the north side of the river, and new stockyards and packing-houses may also be established. New directors have been elected for the Union Depot, Bridge & Terminal Co., the Armour interests being represented by L. E. James of Kansas City, M. McRoberts and George B. Robbins of Chicago, and Mr. Swift by John Donovan of St. Joseph, A. R. Fay

and Edward Tilden of Chicago. Thomas A. Morrow and Theodore C. Bates continue on the board to represent older interests.

The bridge plan is to utilize the piers of the Winner bridge to build a double-deck structure across the stream, and the new union depot is, according to the plans, to be erected on a tract of level land extending east from Grand avenue and Front street to the north end of Troost avenue, and northerly from the north line of Front street to the United States harbor line.

**HUGE RAIL ORDER.**

**Orient Awards Contract for 150,000 Tons—Work in Texas.**

It is reported from Pittsburg that the Kansas City, Mexico & Orient Railway has placed an order with the United States Steel Corporation for 150,000 tons of steel rails. At the prevailing price, \$28 a ton, the value of the contract is \$4,200,000.

From Waco, Texas, it is reported that the Texas Central will probably connect with the Orient at Stamford, where surveyors are now at work for other lines which are seeking to divide with the Orient the traffic which must ensue from the development of the western part of Texas. At various points the Orient will connect with the Southern Pacific, the Texas & Pacific, the Fort Worth & Denver City and the Atchison, Topeka & Santa Fe. Grading is reported to be rapidly progressing across Texas from the Red river to the Rio Grande.

A dispatch from Kansas City says that George Crocker of New York, formerly vice-president of the Southern Pacific Railway, has been elected a director in the Kansas City, Mexico & Orient, and that Russell Harding, general manager of the Missouri Pacific, has also been elected a member of the board.

**Southern Railway.**

The Southern Railway established its winter service for the season on November 30, excepting the Palm Limited, which will begin its trips about January 14. The sleeper from New York and Baltimore to Charleston will run via Charlotte, Rock Hill, Camden and Summerville. Asheville and Brevard, N. C.; Aiken, S. C.; Augusta, Ga., and Florida points will be well accommodated with train service and convenient schedules. Travelers will be able to obtain the usual winter excursion tickets.

For the Christmas holidays the Southern has announced a rate of one and one-third fares for the round trip to all points on its lines. Students and teachers in schools and colleges will be able to obtain these tickets upon presenting certificates from superintendents, principals or presidents of such institutions from December 16 to 22, inclusive. The return limit on these tickets is January 8. Similar tickets will be sold to the general public December 23 to 25, inclusive, December 30 and 31 and January 1, return limit to January 3.

The Southern Railway's large wall calendar for 1903 is one of the most popular and useful. It is being distributed through the company's agencies. S. E. Burgess is traveling passenger agent of the company at 120 East Baltimore street, Baltimore, Md.

**Niagara, N. C., a New Resort.**

The Seaboard Air Line Railway has opened a station at Niagara, N. C., where the New England & Southern Improvement Co. of Boston, Mass., has laid out and proposes to build a town that will be a resort similar to Pinehurst and Southern Pines, which are nearby. Niagara is in Moore county, between Raleigh and Hamlet, being in what is known as the Sand



Hill region. The plans of the company are to build a large hotel and cottages, but individuals will also erect residences. The work is reported to be progressing rapidly under the direction of Dr. W. O. Ruggles, president of the company, whose address at present is Manly, N. C. The town, it is announced, will be different from usual resorts, for it is the purpose of the company to establish water-works and electric lights and to put in granolithic sidewalks. Niagara is on the main line of the Seaboard, and the plan is well laid out with winding avenues, some of them with parking down the center. Around the hotel there will be a park. A church and school are to be erected. At one side of the town will be a good-sized lake, which will bear the same name as the place. The townsite is about two-thirds of a mile long by half a mile in width, and is subdivided into lots of convenient size for building. The climate is said to be all that could be desired for such a resort.

#### Through a Timber Country.

The extensions of the Arkansas & Louisiana Railway Co. southeast of Winnfield, La., to Alexandria and to Jena will, according to the annual report, extend through a fine timber country. It says that the output of long and short leaf yellow pine on the southern part of the main line may be safely estimated at 250,000,000 to 300,000,000 feet a year for at least twenty-five years. These extensions are under contract, the line to Alexandria being about fifty miles long, and that to Jena twenty-eight miles. The extension northward from Stamps to Hope, Ark., is to be completed by the 1st of January. It connects at Hope with the St. Louis, Iron Mountain & Southern. According to the report, the gross earnings display a gratifying increase, the total of \$478,531 showing a gain of \$161,786 over 1901.

A description of the new map of the St. Louis & San Francisco indicates that the system proposes to use the Louisiana & Arkansas Railroad to reach New Orleans.

#### Knoxville & Bristol Sold.

The Knoxville & Bristol Railway, a line forty miles long, extending from Morristown, Tenn., to Corryton, Tenn., has been purchased by Bird M. Robinson of New York, who is president of the Harriman & Northeastern Railroad, and who, it is understood, is largely interested in coal lands on the Cincinnati Southern line. Mr. Robinson has succeeded H. J. Braker as president of the road, and Major H. M. Aiken has been continued as vice-president and general manager.

It is rumored from Knoxville that the Knoxville & Bristol and the Harriman & Northeastern will be connected; that the former will be extended to Knoxville, and that the Seaboard Air Line will build a line through from Waynesville, N. C., to Morristown in order to reach Knoxville, and furthermore, that the road may be extended to the coal properties in which Mr. Robinson is interested. He has not yet, however, disclosed his plans.

#### Railroad, Hotel and Lake.

The Transylvania Railroad Co. writes the Manufacturers' Record from Brevard, N. C., that it is building a 10-mile extension southwest, and at the terminus of the extension the Toxaway Company will erect a 250-room hotel. The contract for this extension calls for its completion April 30, 1903, and it is the purpose of the Toxaway Company to have the hotel completed and open for business by July 1 next. This extension will bring the other hotels of the Toxaway Company at Sapphire within about eight miles of the railroad. At the new terminus the Tox-

way Company is also constructing an immense lake fifteen miles in circumference, on the shore of which the new hotel is being built. This lake will be completed within a few weeks and will be stocked with fish.

#### ENID TO THE PACIFIC.

Interests Associated With the 'Frisco System Charter a Line.

The Enid, San Diego & Pacific Railroad, incorporated in Oklahoma to build a line from Enid, Okla., to San Diego, Cal., will have its principal offices at Enid. The incorporators are John R. Linden, president of the Denver, Enid & Gulf, the 'Frisco extension from Enid to Guthrie; John Murphy, Edmund, W. D., F. C., M. J. and W. P. Frantz, all of Enid.

It is understood that a horseback survey has been made for the line, the engineers returning most encouraging reports. The route is about 1000 miles long, and Mr. Edmund Frantz is quoted as saying that the interests behind the incorporators will insure the building of the road. The capital stock is \$30,000,000.

#### Iowa & St. Louis Plans.

Mr. H. F. Reddig, president of the Iowa & St. Louis Railway Co., writes from Connelville, Mo., to the Manufacturers' Record saying that the company has built eighty-six miles of its main line between Centerville, Iowa, and Macon, Mo., most of the line lying within the latter State.

Nearly all of the track completed is through the Connelville coal district. "This," writes Mr. Reddig, "is the greatest coal field west of the Mississippi river, and when the mines at present located on this line are developed their output will be not less than 10,000 tons per day."

The company proposes to extend the line next year southeast from Macon to St. Louis about 150 miles, and northwest from Centerville to Sioux City about 225 miles.

#### Improving Its Facilities.

Mr. Horton Corwin, Jr., president of the Wellington & Powellville Railroad Co., writes to the Manufacturers' Record from Edenton, N. C.: "We are constructing a wharf and moving our station and business at Windsor to the wharf there to increase our facilities for the handling of the business at that point in connection with our steamer, the Mayflower, which runs from Plymouth to Windsor. We connect at the former point with the Norfolk & Southern Railroad Co. and at Aboskie with the Atlantic Coast Line Railroad Co."

#### To Extend to New Berne.

The Washington & Plymouth Railroad Co. is negotiating for an extension of its line from Washington to New Berne, thirty-five miles, and may make a further extension. The line from Washington to New Berne, Mr. Surry Parker, general manager, writes, would extend "through the most fertile trucking section in the United States. With sixty-eight miles of track we would shorten the time between New Berne and Norfolk ten hours, and would turn all the fish and oyster business to Northern cities over this road."

#### Rock Island Extensions.

According to a dispatch from Guthrie, Okla., the Choctaw, Oklahoma & Gulf Railroad, now in the Rock Island system, will build a line not only from Haileyville, I. T., to Dallas, Texas, but may extend the line from Guthrie to Chandler on to Haileyville. It is further reported that connection will be made from Haileyville through to Kansas City, and that westward from Guthrie the company is pro-

jecting a line through Kingfisher, Watonga, Taloga and Grand to connect with the El Paso line.

#### "ORIENT" TO BE RUSHED.

Line Connecting Kansas City and Wichita Will Be Constructed at Once.

The Kansas City Star says:

"Construction work will begin at once upon that part of the Kansas City, Mexico & Orient Railroad between Kansas City and Wichita, Kan. It is the intention of Mr. Stilwell and his associates to push the work of construction of the main line as rapidly as possible. Mr. Stilwell's alliance with the Gould interests and his connection with the Swift-Armour interests has given his railroad project an importance which can now scarcely be estimated. The building of the line from Kansas City to Wichita has been delayed by litigation with the Atchison, Topeka & Santa Fe Railroad over the right to cross that company's tracks at Emporia, Kan. The Supreme Court affirmed the right of the Orient to a crossing, and the last obstacle to the construction of the line has been removed. The line will be completed in time to connect with the outer terminal belt line, which is to be built at once.

"That part of the line between Kansas City and Wichita will take in the towns of Lawrence, Emporia, Eldorado, Yates Center and Wichita. The Orient now has a line in operation between Anthony, Kan., and a point a short distance this side of Sweetwater, Texas.

"Mr. Stilwell is waiting only for the Kansas City, Kan., city council to pass a franchise bill to begin construction upon the outer belt terminal system. From the point where the proposed bridge is to land in Kansas City, Kan., near the Maple Leaf elevator the company has secured, by purchases and condemnations, a right of way through the city to Kerr's Park at Eighteenth street and Minnesota avenue, and from there on to the Kaw valley.

"By this route the outer belt will tap every line of railway entering Kansas City from the north and west, and also give entrance to the city from the Kansas City, Mexico & Orient."

#### New Equipment.

The Southern Pacific Railway has contracted with the Pullman Company for 100 60-foot chair cars with vestibules, delivery to be made next year. It has also contracted with the American Car & Foundry Co. for seventy-five refrigerator cars forty feet long, to be delivered early in 1903.

The Southern Railway Co. has filed at Richmond, Va., a mortgage for \$4,144,396 to cover eighty-nine locomotives, 2500 gondola cars and 604 miscellaneous cars.

#### Street Railway Deal.

The Montgomery Traction Co. of Montgomery, Ala., is reported to have closed a deal for control of the Montgomery Street Railway by purchasing the holdings of Mr. R. Tillis, president of the latter company. J. G. White & Co. and others of New York are said to be interested.

#### Railroad Notes.

The new cut-off for the Baltimore & Ohio Railroad from Hancock, Md., to the Pittsburg division will save forty-five miles on the line from Baltimore to Pittsburg.

An official of the Southern Pacific Railroad is reported as saying that about January 1 the trains of the Southern Pacific will enter the Illinois Central depot at New Orleans.

The Georgia, Florida & Alabama Railway Co. has completed its line from Tallahassee, Fla., to Cuthbert, Ga., and now

has on regular freight and passenger trains. This road runs through a very fine farming and timber section.

A dispatch from Petersburg, Va., reports that G. W. Lambert of Richmond has been awarded the contract for building the freight depot on Washington street for the Atlantic Coast line. It will be one story and 376x60 feet in size, and will extend from Union street to Sycamore street.

The substantial character of the Brunswick & Birmingham Railroad has been tested by the extension of the use of its line to another company to reach Brunswick, and it is reported that its large 100-ton engines, hauling heavy trains, passed in and out over the road without the least difficulty.

It is reported from Annapolis, Md., that the Washington, Baltimore & Annapolis Electric Railway Co. has purchased, through A. F. Hughes, a site for a terminal station between West street and Northwest street, on Church Circle, including the Arundel Building and two dwellings.

A letter from Owensboro, Ky., says that the Illinois Central Railroad has awarded a contract to McArthur Bros. of Chicago for grading work on a branch line from Marion, Ky., to the Ohio river opposite Cave-in Rock. This is expected to supply a necessary link in the short line from Louisville to Nashville.

Advices from Memphis report a heavy rush of homeseekers and colonists to the Southwest, the sales in one day amounting to 1400 or 1500 tickets. It is stated that from 800 to 1000 of the settlers went out over the St. Louis Southwestern. Heavy arrivals are reported at Fort Worth, Texas, also, over the Cotton Belt.

Advices from Louisville, Ky., state that the Louisville & Nashville Railroad Co. will build a passenger station on Baxter avenue next spring. The plans have been made, and the station will accommodate people in the eastern part of the city. The company also proposes to erect an office building at Ninth street and Broadway.

G. A. Clark has been appointed general manager of the Tennessee Central Railroad, succeeding L. S. Miller, who becomes general manager of the Tennessee Construction Co., which is building the extensions of the Tennessee Central. Mr. Clark has been superintendent of the Paducah division of the Illinois Central Railroad.

According to the report of the Louisiana railroad commission for the year ended June 30, 1902, there were 237 miles of railroad constructed during the period, the total in the State now being 2899 miles. There are thirty-two lines in the State, but they are actually under the control of not more than fourteen corporations.

The report that the Shreveport & Red River Valley Railroad has been acquired in the interest of the Southern Pacific system is denied by Mr. Thornwell Fay, general superintendent of the Southern Pacific lines in Louisiana. He is also quoted as contradicting the report that the company will invade the territory of the Texas & Pacific.

The Pennsylvania Railroad Co. proposes to build a new passenger station on Gay street, in the northeastern part of Baltimore, Md. It is expected to take the place of the Biddle street station nearby, inasmuch as the new depot will be on one of the main divisions of the street railway. The plans provide for a three-and-one-half-story brick building 22x96 feet, with roof of red tiling. The line being elevated, the tracks will be on a level with the third floor. The building will cost about \$20,000.

## MINING.

### French Capital in West Virginia.

A French company, of which Messrs. A. & P. Picard of Paris, mining engineers, now registered at the McLure Hotel, Wheeling, W. Va., are the American representatives, and which is reported to be capitalized at \$40,000,000, is investigating the coal and iron lands of West Virginia with the object of opening mines for the coal and erecting a large plant for the manufacture of fine steel, the product of these industries to be shipped to France. It is now hoped that West Virginia coal will be leaving Newport News or Norfolk by June 1, as it has been found possible to mine in West Virginia and then undersell in France the coals of Cardiff and other English mines. The Messrs. Picard return to Paris this month to convey their reports and recommendation to their company. Steel will be manufactured by a newly-patented French process.

### Clinchfield Coal Co.

Clinchfield Coal Co., Bristol, Va.-Tenn., has been incorporated, with a very liberal charter, capital to be not less than \$100,000 and not more than \$500,000, to mine, quarry and prepare for the market iron, rock, stone, clay, timber and all kinds of minerals and metals. George L. Carter is president; J. Normant Powell, vice-president, and C. B. Anderson, secretary and treasurer; these, and T. F. Davis and J. J. Fred Johnson, are the directors. The company owns and controls very extensive timber, coal and mineral lands in Virginia.

### A 13,000-Acre Deal.

Messrs. Chilton, MacCorkle & Chilton of Charleston, W. Va., have sold to W. C. Sproull of Chester, Pa., 13,000 acres of land on Cobb's and Faqua's creeks, in Lincoln county, West Virginia, in the Coal river basin. This property is regarded as one of the richest deposits of Kanawha coal, and the establishment of a great operating plant on part of the property is another consideration. The grading of a railroad which is being pushed up Coal river has been completed to a point a mile above this property.

### Will Employ 1000 Men.

Hillman Coal Co., Grand Rivers, Ky., has discovered a four-foot vein of Bell coal at a depth of 250 feet near Sturgis, Ky. The company will sink a shaft at once. It is rumored that 200 coke ovens will be built and upwards of 1000 men employed. Messrs. Davis & Finley of New York, N. Y., represent the company in negotiations now pending with President J. L. Frankel of the Tidewater Coal Co. regarding a deal for that company's property.

### Mining Notes.

Bevier Coal & Mining Co., St. Joseph, Mo., has been incorporated, with \$50,000 capital, by H. Van Brunt, J. J. Barton, Eugene Cooper and others.

Black Hawk Coal Co., said to be a branch of the Baer syndicate, is opening mines near Flemington, W. Va., and will use the entire output in its Eastern mills.

J. M. Guffey Coal Co., Wheeling, W. Va., has completed the survey of 6000 acres of coal land on Brushy Fork, near Digman, W. Va. It is said this will be developed.

A dispatch from Mena, Ark., announces that at the Davis mines, four miles west of Gillham, a strike of lead and zinc has been made at a depth of sixty feet with a face of from four to six feet.

J. A. Williams of Matewan, J. A. Ballard, John W. Booth, George T. Booth

and H. E. Wade of North Fork are the incorporators of the Marvin Coal Co. of Matewan, W. Va.; \$25,000 capital.

Mascott Coal & Coke Co., Beckley, W. Va., has been incorporated, with \$100,000 capital, to conduct a general coal-mining business, by Cyrus E. Scott, Harry C. Elliott, John F. Davis, A. B. Redden and T. J. McGinnis, Beckley.

Mr. J. M. Guffey, through Mr. James Hair of Fairmont, W. Va., has purchased 12,000 acres of coal land near Fairmont, making Mr. Guffey's holdings in excess of 20,000 acres. This land is on the Taylor-Barbour county line.

Lamont Mining Co., Lamont, W. Va., has been incorporated, with \$10,000 capital, to do a general mining business on Cabin creek. W. A. Ohley and James Kay of Charleston and A. J. Baker, P. Jones and J. C. Jones of Hinton, W. Va., are the incorporators.

A charter has been issued to the Stetler Coal & Coke Co., Belington, Barbour county, West Virginia, with a capital stock of \$2,000,000. The incorporators are S. N. Stetler, C. P. Matthews, S. L. Rowston, Charles F. McBryde and W. L. Hill of Scranton, Pa.

It is rumored that the work of developing 1000 acres of coal land owned near Wellsburg, W. Va., by the Wellsburg Coal Co., will begin almost at once. James A. West of Beaver, Pa., is president; L. F. Darrall of Allegheny, Pa., secretary, and William G. Wilkins of Pittsburgh, Pa., engineer, of this company.

Adalina Zinc Co., Alexandria, Va., has been incorporated, with \$300,000 capital, to do a general mining and mineral business. The incorporators are C. E. Wood, president; Charles Jackson and E. S. Cochran, vice-presidents; Frank R. Raymond, secretary, and W. S. Knox, treasurer. The incorporators are Washingtonians.

It is rumored that Col. S. W. Bramblett, Carlisle, Ky., will dispose of twelve tracts, some 10,000 acres in all, of rich coking coal and timber land located in Harlan county, near the Virginia line, to Messrs. N. B. Dotson, Wise county, Virginia, and President Harman of the Pocahontas Coal Mine Co. The coal veins are said to be from three to nine feet in thickness.

It is reported that the headquarters of the Virginia Iron, Coal & Coke Co. will be located in Radford, Va. This company is said to employ 5000 people and to mine 4000 tons of iron ore daily. John B. Newton, who recently resigned from the presidency of the Knoxville, La. Follette & Jellico Railway, is to become vice-president and general manager of this company. His offices are at Bristol, Va.-Tenn.

Mississippi River & Cannel Coal Co. has been incorporated, with \$50,000 capital, to develop several thousand acres of coal land in Walker and adjoining counties, in the vicinity of Oakman, Ala. George Clifton, Greenwood, Miss., is president; W. J. Francis of Cincinnati, Ohio, secretary-treasurer, and John M. Kirkwood of New Orleans, La., manager. It is the intention to begin developments and open mines at once.

Mr. W. J. Brent, Norfolk, Va., has secured an option on 250 acres of gold-bearing ore land in Lexington county, North Carolina, and has sunk a shaft to a depth of eighty feet. It is stated that there are five undeveloped veins of gold, besides deposits of copper, on this land. This is further stated to assay \$28 of gold and \$22 in copper to the ton. Mr. Brent is seeking to interest capital in this property for the purpose of developments.

Sheffield Coal & Iron Co., West Point, Tenn., J. W. Bledsoe, general manager, and W. E. Bennett, superintendent, will build two and one-half miles of railroad to its workings which will have a capacity of forty-nine cars of ore daily after the installation of boilers, small locomotives and all kinds of mining machinery, for which this company is now in the market. Mr. Crow, West Point, Tenn., is the contractor.

Mr. C. T. O'Ferrall, Jr., Roanoke, Va., has formed a coal company of Richmond and Roanoke men, for the purpose of operating lands along the Chesapeake & Ohio, near Huntington, W. Va., on which leases are said to have been secured. The new company is in the market for all machinery pertaining to drift mining, cars, rails, tipples, roofing, etc. Mr. O'Ferrall may be reached at the Florentine Hotel, Huntington, W. Va.

Cane Creek Coal Co., Birmingham, Ala., has been incorporated, with \$200,000 capital, by H. F. De Bardeleben, J. L. Dillon and A. C. Vigo, all of Birmingham, to do a general mining and manufacturing business, to mine and sell ore, coal and limestone and to manufacture pig-iron. This company, of which H. F. De Bardeleben is president, and J. L. Dillon, secretary and treasurer, has purchased land in Shelby and Bibb counties. All of the stock has been taken.

Rowland Land Co., Charleston, W. Va., has been incorporated, with \$1,000,000 capital, to conduct a general coal-mining business in Raleigh, Wyoming, Boone and Kanawha counties. The incorporators are J. H. Rowland of Port Deposit, Md.; J. Roman Way of Williamsport, Pa.; E. C. Coleord of St. Albans, W. Va.; S. C. Rowland of Baltimore, Md.; S. T. Foresman of Williamsport, Pa.; John Wehrle of Charleston, W. Va., and J. W. Bowman of Williamsport, W. Va.

Spears Mining Co., Yardelle, Newton county, Arkansas, will build a 100-ton concentrating plant to handle the output from its lead and zinc mines. The company has been mining about five months, and has put down a 7x8 shaft 107 feet in that time, and has brought up a large quantity of ore. A second shaft is now being put down. As soon as water is struck, for which drilling is being done, a mill will be put up. The company, of which Thos. Cox, Dardanelle, Ark., is president; T. J. Shinn, Yardelle, Ark., vice-president; J. C. Bunch, Harrison, Ark., secretary and superintendent, and J. E. Thompson, treasurer, owns 968 acres of land.

Gainesville (Ga.) Cotton Mills has called a meeting of stockholders to act on a resolution of the directors to increase capital. The meeting will be held January 10, and an increase from \$500,000 to \$850,000 is contemplated. This stock will, if issued, be entitled for a period of ten years to dividends from the net earnings at the rate of 6 per cent. annually, payable semi-annually, and the dividends to be cumulative. The company operates a plant of 25,200 ring spindles and 740 looms.

Mention was made last week that German capitalists had under consideration the question of locating a cotton mill at Rosedale, Miss. This enterprise may possibly develop in the near future, but no arrangements have been completed. A manufacturer from Saxony was in Rosedale during the past month representing the projectors. Chas. Scott of Rosedale has endeavored to secure the enterprise.

A. Hinrichsen, No. 97 Rue Vanderlinden, Brussels, writes that he desires details of a recent American invention for rendering glass unbreakable.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

### The Cotton Movement.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during the first three months of this season was 5,096,566 bales, an increase of 253,553 bales; the exports were 2,410,680 bales, a decrease of 112,296; takings by Northern spinners 699,938 bales, a decrease of 10,849; by Southern spinners 611,762 bales, an increase of 57,258.

For the ninety-six days of the season up to December 5 the amount brought into sight was 5,434,105 bales, an increase of 254,805 bales; the exports were 2,604,634 bales, a decrease of 102,892 bales; takings by Northern spinners 760,793 bales, a decrease of 19,873 bales; by Southern spinners 656,762 bales, an increase of 67,398 bales.

### Large Mills for Texas.

For several years past there has been considerable activity in cotton-mill building in Texas. A number of plants have been completed in the State, and are now operating successfully. According to interviews appearing in the Houston press, three more large cotton factories have been contracted for. It is stated that Judge A. M. Hatcher of Houston, Texas, has arranged with Eastern capitalists for financing these enterprises and for the sale of the product after the mills are in operation. Referring to one of the mills, Judge Hatcher is quoted as saying it will have 15,000 spindles and 244 looms, manufacturing print cloths, and represent the investment of \$225,000. In this plant electrical power will be used exclusively. Details as to the other mills are not announced.

### A \$200,000 Addition.

Announcement is made that the Union Cotton Mills of Lafayette, Ga., will enlarge its plant. The stockholders in the company met recently and authorized this enlargement, but the decision did not become publicly known until during the past week. Mill architects are now preparing plans and specifications for the improvements. The erection of seventy-five operatives' cottages will be a part of the betterments. The company now has 7680 ring spindles and 212 looms, manufacturing sheeting, toweling and drills. This equipment will be increased by 10,000 spindles and 288 looms. About \$200,000 will be expended on the new buildings and machinery.

### Hope Mills Improvements.

Work is progressing on the improvements of the Hope Mills Manufacturing Co. at Hope Mills, N. C., and will soon be completed. These improvements have been made according to the plans announced last June. The additional structure is 150x300 feet in size, and will be equipped with 200 looms and a finishing plant. Messrs. Lockwood, Greene & Co., the well-known mill architects of Boston, Mass., have been in charge of the betterments. The company's present plant has 12,582 spindles and 751 looms, manufacturing madras, chevrons and dress goods. It is stated that about \$100,000 is the expenditure involved in the extensions.

### A \$250,000 Addition.

Lockhart Mills of Lockhart, S. C., will build an additional mill to cost \$250,000. A decision to this effect was made by the stockholders at their annual meeting held during the past week. An increase of cap-



ital stock from \$650,000 to \$1,000,000 has been authorized to supply the funds, and action will be taken at once. Further details regarding this addition will be announced soon. The company also declared its usual semi-annual dividend of 3 per cent., and John C. Cary was re-elected president-treasurer. There are 25,000 spindles and 800 looms in the present plant.

#### Piece Goods for India.

Valabhdas Runchordas & Co., No. 19 Humum street, Fort, Bombay, India, write to the Manufacturers' Record that they are particularly interested in hardware, building material, bicycles, rubber goods, files, wire nails, screws and piece goods, and add: "There is a good opening for piece goods in our market. The large part of this trade is confined to our cast-brethren, and hence we are in the best position to push this trade."

#### Crop Guesses at Memphis.

Mr. Henry Hotter, secretary of the Memphis Cotton Exchange, announces that the general average of 128 estimates by members of the exchange of the commercial cotton crop of 1902-1903 was 11,161,838, the lowest estimate by Irby Boyd, 10,200,000 bales, the highest estimate by S. J. York, 12,200,000 bales, and the nearest estimate to the average by J. F. Matthis, 11,160,346 bales.

#### Textile Notes.

J. F. Williams' knitting mill at Shelby, N. C., was destroyed by fire during the week. The loss was about \$12,000.

Lynchburg (Va.) Cotton Mill Co. has declared a semi-annual dividend of 4 per cent. on its common and preferred stock. It is capitalized at \$600,000.

Goldville Manufacturing Co., Goldville, S. C., and plant of 5000 ring spindles will be offered at public outcry on January 8, in pursuance of an order of court.

New Jersey silk manufacturers contemplate building a mill in the South, and have been investigating the advantages of High Point, N. C., as a location. They have optioned a site in that town from J. Elwood Cox.

Messrs. E. H. Easterling and Felix May of Jackson, Miss., announce that they are organizing a cotton-mill company. They propose capitalizing at \$250,000, and building the plant at Cold Springs, Miss. They are prominent lumber manufacturers at Jackson.

Cumberland (N. C.) Cotton Mills Co. contemplates enlarging its plant; now operating 3000 spindles. With the election of J. Frederick Houston of Philadelphia as president the company has removed its main office to 704 Provident Building in that city.

The stockholders of Pacolet (S. C.) Manufacturing Co. held their annual meeting last week and declared their usual semi-annual dividend of 5 per cent. V. M. Montgomery of Spartanburg was elected president-treasurer, succeeding his father, Capt. John H. Montgomery, recently deceased.

The Capital City Mills of Columbia, S. C., is changing its equipment of machinery so as to produce a finer grade of goods. The company has heretofore used 400 bales of cotton each month, and with the changes will reduce this consumption to 100 bales. It has 6200 ring spindles and 200 looms.

Messrs. B. Frank Mebane, W. R. Walker and J. S. McAllister of Spray, D. F. King and A. E. Miller of Leaksville, N. C., have incorporated the Spray Woolen Mills Co. of Spray, N. C., with capital stock of \$105,000. The company's purpose is to manufacture woolen cloths.

These incorporators are already interested in several textile mills at Spray.

The stockholders of Spartan Mills, Spartanburg, S. C., held their annual meeting last week. The regular semi-annual dividend of 5 per cent. was declared, payable January 1. W. S. Montgomery was elected president and treasurer, to succeed his father, Capt. John H. Montgomery, recently deceased.

It is reported that Messrs. W. C. Clark, N. S. Turner and C. H. White of Covington, Ga., will build a \$200,000 cotton factory. They have purchased a valuable water-power property and 800 acres of land near Covington, and it is presumed the power will be developed in connection with the reported mill.

Williamsburg (Va.) Knitting Mill Co. will cease operating its mill about January 1 and remain idle thirty days while new and improved machinery is being installed. The plant will be generally overhauled. It has been operating twenty-five knitting machines on the manufacture of fleeced-lined underwear and balbriggans.

Spray (N. C.) Water-Power & Land Co. has closed contracts ensuring the establishment of a large cotton mill on its land at Spray. Names of the parties to build the plant have not been announced as yet. It is known that the main building will be a 100x300-foot structure. Further information will be announced later on.

#### Cottonseed-Oil Notes.

It is stated that Mr. Lewis C. Ehle of Chicago purchased last week the Grandview oil-mill property at Cleburne, Texas. The consideration was \$40,000.

Cottouseed and its products were quoted last week at Memphis, Tenn., as follows: Cottonseed by river, \$13 per ton, and by rail in bulk, \$12, delivered; cottonseed oil, 29 to 29½ cents for prime crude, and prime summer yellow, 32 cents; cottonseed meal, \$20.50 to \$20.75 per ton for prime, and cake, \$21.25 to \$21.50 per ton; linters, 2½ to 3 cents per pound.

The Transatlantic Trading Co. of Galveston, Texas, reports the shipments of cottonseed products from that port for November as follows: Foreign shipments of cottonseed meal, 21,175 tons; cottonseed cake, 4820 tons, or a total of 25,995 tons. The same company reports New Orleans shipments for November at 7060 tons of cottonseed meal and 30,330 tons of cottonseed cake, or a total of 37,390 tons.

The Oliver Refining Co. of Portsmouth, Va., was chartered last week with a capital stock of not less than \$200,000 nor more than \$500,000. The following are the officers of the company: John Oliver of Norfolk, president; Frederick Oliver of Charlotte, N. C., secretary and treasurer; George Sinsler of Portsmouth, vice-president. The above officers, with Mary E. Oliver of Norfolk and Annie S. Oliver of Charlotte, will form the board of directors. The company will buy, manufacture and sell cottonseed products, chemicals and fertilizers.

The quotations for cottonseed products on the New Orleans Cotton Exchange on the 8th inst. were as follows: Prime refined oil in barrels, per gallon, 35½ cents; off refined oil in barrels, per gallon, 34 cents; prime crude oil, loose, per gallon, 29 cents; prime cottonseed cake, per ton of 2240 pounds, \$26 to \$26.25; prime cottonseed meal, per ton of 2240 pounds, \$25 to \$25.25; soap stock, per pound, loose, 1.15; linters, choice, per pound, 3¼ cents; A, 3½ cents; B, 3¼ cents; C, 2½ cents; cottonseed in sacks delivered at New Orleans, per ton of 2000 pounds, \$13; in bulk delivered at New Orleans, per ton of 2000 pounds, \$12.

## PHOSPHATES.

### ARKANSAS PHOSPHATES.

#### Suggestions About Making Them of Practical Value.

In a bulletin issued by the Arkansas Agricultural Experiment Station on the phosphate rocks of Arkansas especial attention is given to the deposits in north central Arkansas lying within parts of Independence, Stone, Izard, Searcy, Marion, Baxter and Newton counties, which are attracting attention because of the construction in the region of two railroad lines, which will render possible the development of the deposits. One company is already manufacturing acid phosphate. The rock which it is mining is soft, easily crushed and in appearance identical with some of the Tennessee rocks, working up into a dry, friable acid phosphate. The bulletin describes the occurrence and character of the rocks by several localities, and gives the results of analyses of the better grades of phosphate rock. These analyses are given, regardless of whether the materials are available for the manufacture of high-grade fertilizers. Commenting upon them the bulletin says:

"It is evident at a glance that in the majority of cases given the iron and alumina contents are high for the manufacture of high-grade fertilizers. We are far from believing, however, that these analyses condemn the phosphate rocks of North Arkansas.

"In the first place, the whole area over which the phosphate beds occur or are to be expected has not been examined, and it is not known, therefore, how much the materials vary in character and composition. Judging from what is already known, it seems reasonable to suppose that better deposits than any thus far found may yet be discovered.

"In the second place, Dr. Wyatt points out that 'superphosphates of exceptionally good quality' may be made of phosphate rocks 'containing as high as 8 per cent. of iron and alumina.'

"The point, however, to which we would direct especial attention is that all of these rocks, even those running high in iron and alumina, may be used directly as fertilizers.

"This is a fact of the first importance to the owners of phosphate lands and to the farmers of the South. This method of fertilizing is now being successfully used in the southwestern part of France, where there are phosphate deposits similar to those of Arkansas. The natural rock is there ground to a fine powder and spread upon bottom lands, from 450 to 600 pounds to the acre. On one estate near Osse the black phosphates were used where the results could be compared with those obtained from the use of superphosphates and stable manure. The land was what we call 'bottoms'; the raw phosphate rock was finely ground, and 600 pounds used to the acre. The crops were Irish potatoes and corn. The planter reports that the results obtained from the raw ground phosphate rock were quite as good as those had from the use of stable manure and from high-priced superphosphates.

"There is nothing new, however, in these results. Dr. Wyatt, in his valuable work upon the phosphates of America, writes as follows in regard to a phosphate as high as 31 per cent. in iron and alumina: 'It appears to have been forgotten, overlooked or ignored by the opponents of these phosphates that the phosphoric acid in the soil invariably exists in the form of phosphates of iron and alumina. The so-called experts had probably not then learned what they are now compelled to admit, that although some difficulty

may attend their decomposition in the factory or their transformation into chemical fertilizers, these phosphates are extremely valuable in the raw state, if very finely ground, as a direct manure.'

"Another fact which should not be overlooked in this connection is that the constitution and physical condition of the soil should not be neglected. The grinding of the rock also costs something; this cost is estimated to range from fifty cents to two dollars per ton."

In conclusion, the bulletin says:

"With the competition of the deposits of South Carolina, Florida and Tennessee, the Arkansas product must be mined and removed cheaply if it is to be mined at all. If the phosphate lands of the State are bought up by speculators and sold at high prices, the business of mining and shipping this mineral in the State of Arkansas will die before it is born. Only extraordinarily rich deposits could be worked profitably under such conditions. "St. Louis seems to be well adapted to the manufacture of fertilizers, both on account of railway facilities, its location with reference to the users of fertilizers, and also on account of the cheapness and convenience of sulphuric acid at that place. In any contemplated manufacture of fertilizers in the State of Arkansas one must consider the necessarily high freight rates that will have to be paid on the sulphuric acid required, and the advantages and disadvantages of the site of a factory as a distributing point for the manufactured article."

#### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., December 10.

The local phosphate market is very steady, and while the volume of business is light, the outlook for next year is more encouraging. A quiet tone prevails at the moment, in sympathy with other fertilizer ingredients. The only charters reported were the schooner Annie L. Mulford, 518 tons, from Charleston to New York with phosphate rock at \$2.35 and discharged, and the British steamer Lorie, 1694 tons, from West coast South America to United States or United Kingdom with nitrate on private terms. The situation at all mining sections in the South shows an improvement over the corresponding period last year. In Florida prominent companies have enjoyed a much more prosperous year than that of 1901, and in the land-people territory especially the volume of business has shown considerable expansion. Shipments of rock from the Florida ports are very heavy, and from Port Tampa especially they have for the present year broken the record. Some very heavy transactions for 1902 have been closed during the past ninety days by land-people companies, and the prospects are that shipments for 1903 will be very heavy. Prices realized have been good, and the outlook is encouraging for a further appreciation in values next year. Hard-rock miners are making good shipments, and the prospects are favorable for a good demand in the near future. South Carolina phosphate rock continues to rule steady, with a moderate domestic inquiry. At Mt. Pleasant, in the Tennessee section, the market during the past week has ruled decidedly firmer, with a good domestic demand. A prominent company is said to have sold 12,000 tons of phosphate rock for interior trade, to be delivered at the rate of 1000 tons a month at or near quotations. The supply of rock in sight is light, and with the present demand for both domestic and export prices are likely to rule firm and higher during 1903. The tone of the market at the close of the week was firm at \$3 for 75 per cent. rock and \$3.25 for 78 per cent.

**Fertilizer Ingredients.**

The market for ammoniates continues to rule quiet, with no urgent demand from any source. The list of values, however, is very steady at the following quotations. Stocks in the West in the hands of packers are reported light, and in the event of an urgent demand values would appreciate. The report from the American Fisheries Co. for past year is announced, and fish scrap is reported firm at quotations. The fish catch during the season reached 1,375,786 barrels, from which were obtained 55,000 barrels of oil, 11,000 tons of dried scrap and 32,000 tons of acidulated scrap. Last year the catch was 867,210 barrels.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)...	\$2 97 1/2 @ 3 00
Nitrate of soda, spot Balto...	1 90 @ 2 00
Blood .....	2 52 1/2 @ 2 55
Azotline (beef) .....	2 52 1/2 @ 2 55
Azotline (pork) .....	2 52 1/2 @ 2 55
Tankage (concentrated) .....	2 35 @ 2 37 1/2
Tankage (9 and 30) .....	2 47 1/2 @ 10 1/2 50 & 10
Tankage (7 and 30) .....	20 50 @ 21 00
Fish (dry) .....	32 50 @ 35 00

**Phosphate and Fertilizer Notes.**

The shipments of phosphate rock from the port of Fernandina, Fla., for the month of November amounted to 5800 tons, shipments previously reported 171,795 tons, making a grand total for eleven months ending November 30 of 177,595 tons.

The German steamer Karl cleared last week from Port Tampa for Stettin with 2750 tons of phosphate rock; the schooner Medford cleared on the 26th ult. for Gordon Heights, Del., with 2000 tons, and the schooner Josephine for Philadelphia with 950 tons.

Messrs. J. M. Lang & Co. of Savannah, Ga., report the shipments of high-grade Florida phosphate rock for the month of November at 20,943 tons, shipments previously reported 154,814 tons, making a grand total for eleven months ending November 30 of 175,757 tons.

The new plant of the Federal Chemical Co. of Louisville, Ky., recently built in Nashville, Tenn., was put in operation last week. It is constructed for the manufacture of commercial fertilizer from Tennessee phosphate rock, and was erected at a cost of \$150,000.

It is stated that Mr. John W. Huger, who recently resigned as manager of the Memphis branch of the Virginia-Carolina Chemical Co., will soon establish a company for the manufacture of chemical fertilizers. Capitalists from Hickman, Tenn., and South Bend, Ind., are associated with Mr. Huger in his enterprise.

It is stated that the past year has been a very profitable one for the American Fisheries Co. The catch during the season just ended reached the large total of 1,375,786 barrels, from which were obtained 55,000 barrels of oil, 11,000 tons of dried scrap and 32,000 tons of acidulated scrap. Last year the catch was 867,210 barrels. The officers of the company are Capt. N. B. Church, president and general manager; Thomas Goodbody, vice-president; W. R. Morse, treasurer, and Benjamin Clark, secretary.

The Owensboro (Ky.) Business Men's Association has been reorganized, with a membership of 101, to advertise the advantages of the city and to induce the investment of capital in manufacturing and other business enterprises. The president is Mr. John G. Delker, and the secretary is Mr. W. G. Archer.

The Chamber of Commerce of Atlanta is arranging for an industrial convention in that city on January 20, where representative men from all parts of the State may formulate plans and further the movement for a greater Georgia.

**LUMBER.**

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

**LUMBER MARKET REVIEWS.****Baltimore.**

Office Manufacturers' Record,  
Baltimore, Md., December 10.

A moderate volume of trade has been the rule in the local lumber market during the past week, and as the year is drawing to a close, no unusual features are expected to materialize in the industry. The receipts of lumber during the week have been fair, and the demand from the usual sources somewhat lighter than several weeks ago. The North Carolina pine situation is in good shape, and receipts are ample for present requirements. Stocks at all milling points are reported in good condition, with the supply showing no accumulation. Cypress is in moderate supply, with the demand less liberal, with prices very steady. In poplar the market is active, with considerable strength, and the inquiry showing no decrease. On the other hand, dealers are eager to have their orders executed promptly. In hardwoods values are well maintained, and the demand from out-of-town dealers is quite active. Manufacturers and exporters are enjoying a good home trade at stiff prices, and while facilities for shipments are said to be likely better in the near future, values at the moment preclude the possibility of a large foreign business.

**Brunswick.**

[From our own Correspondent.]  
Brunswick, Ga., December 8.

The first week in December closed showing but a small movement in lumber shipments from the three ports of this section—Brunswick, Darien and Fernandina. At Brunswick the total shipments, both coastwise and foreign, amounted to only 1,324,250 superficial feet, being possibly the most insignificant movement in the history of the port during the last fifteen years. The coastwise shipments consisted of 751,000 superficial feet of lumber, 8000 superficial feet of cypress shingles (or 40,000 pieces), and 89,250 superficial feet of railroad cross-ties (or 2000 pieces). Out of this there was but one steamer shipment, and it going to New York, made up of 395,062 superficial feet of lumber, 40,000 pieces cypress shingles, 1648 pieces railroad cross-ties and 80 cases of cedar wood. The foreign exports consisted of 254,000 feet of sawn pine timber, 163,000 feet of pine boards, 42,000 feet of pine joists and scantlings and 17,000 feet of oak planks, making a total of 476,000 superficial feet, the cargoes going to Morocco and Liverpool, and valued at \$6777. The foreign naval-store movement consisted of 682,115 pounds of rosin, valued at \$3410, and 147,874 gallons of turpentine, valued at \$75,415. The lack of tonnage is still greatly interfering with the outward movement, and at the same time there is practically no cessation in the tidewater movement from the interior. The market features show an abundance of orders at the nearby and interior mills, and reveal every strong indication of healthy conditions. At the port of Darien there were no shipments reported for the week, although there are five vessels loading for both coastwise and foreign destinations. At the log booms a considerable volume of hewn and sawn timber is on hand and coming down each day. At the port of Fernandina shipments were larger in volume, amounting to 1,428,426 superficial feet, of which 457,829 feet went to New York, 430,000 to Boston and the balance to foreign ports, consisting of 540,597 feet, going to Canada and Liver-

pool. Shipments at Fernandina were greatly retarded by the inclement state of the weather. The total movement of lumber from the port of Fernandina for the month of November amounted to 14,954,155 superficial feet, and consisted of coastwise cargoes of 11,941,000 feet of lumber, 2,210,208 superficial feet of railroad cross-ties (or 50,232 pieces), and the foreign 802,947 feet of lumber. The question of coastwise freight rates from the South Atlantic remains satisfactory, but the reluctance of the owners to contract with the shippers because of the storm period is about as bad as reported last week. The basic rate is quoted from Brunswick to New York at \$5.50 on lumber and 15 to 16 cents on ties. Recent charters from this section show the following: From Brunswick, schooner Blanche King, 1022 tons, to New York with cross-ties at 16 cents and switch ties on deck; schooner Wm. Downes, 638 tons, to New London with lumber at \$5.75; schooner Wm. H. Surmon, 543 tons, with switch ties on private terms to New York; schooner Howard B. Peck, 449 tons, with lumber to New Haven at \$5.75. From Fernandina, schooner Evie B. Hall, 360 tons, with lumber to New York at \$5.50; schooner Mamie Swan, 648 tons, to New York with cross-ties at 16 cents and lumber at \$5.50, and schooner Lullie L. Pollard, 471 tons, with lumber to Philadelphia at \$5. The only foreign charter reported was that of the Norwegian bark Seringa, 1116 tons, from Sapelo to the United Kingdom with sawn timber at 75/ and hewn timber at 25/.

**Mobile.**

[From our own Correspondent.]  
Mobile, Ala., December 8.

The timber market still continues to show indications of a further advance, and the changes occurring in the market during the past month have all been towards a higher range. Sales of sawn timber last week were reported at 18 to 18 1/2 cents, the latter for 35 cubic feet average. The market continues firm, with a slight increase in the amount of stock on the Gulf. The demand for hewn oak timber is good at 18 to 20 cents per cubic foot, and hewn poplar is steady at 14 to 15 cents per cubic foot. The lumber trade is active, and mills, both here and at adjacent points, continue to run on full time, and many running day and night. Five large steamers were in port on the 2d inst., each with a capacity of over 2,000,000 feet of lumber, the largest of them, the Sahara, having a carrying capacity of 3,000,000 feet. During the past week the following shipments were reported: Bark Steinvora for Montevideo with 63,461 cubic feet of sawn timber and 761,531 superficial feet of lumber; bark Fjord for Delagoa Bay, South Africa, with 62,091 cubic feet of sawn timber and 9626 feet of lumber. The steamer Jupiter cleared for Gibraltar with 65,903 cubic feet of sawn timber. Other shipments of lumber aggregated 800,000 feet, mostly to British, Central America and coastwise ports. The total shipments of lumber from Mobile since September 1 aggregate 18,139,989 feet, against 21,059,082 feet a year ago. Timber and lumber freights continue steady, with a moderate offering of vessels. The British steamer Phoenixia was taken last week to load here with timber for Alexandria at \$3/9, January, and the German steamer Marie, 891 tons, from the Gulf to one or two or three ports Italy, option Tunis, Tripoli or Sfax, with timber at \$6/3, January.

**Norfolk.**

[From our own Correspondent.]  
Norfolk, Va., December 8.

The situation in all departments of the lumber industry of this section continues

to attract attention on account of the steady and substantial state of the market. While the volume of business for November did not show any expansion on account of bad weather, scarcity of cars and other causes, the market has shown up in the best of form for North Carolina pine, with a corresponding improvement in the hardwood trade. At a meeting of the North Carolina Pine Association, held in this city last week, the reports from members present were of a very encouraging character in regard to the course of the lumber market, stocks on hand and general conditions. No change was made in the price-list, and it was the opinion of the meeting that the present list should remain during the next thirty days. The situation at all interior milling sections shows considerable activity, and the output is of an average character, sufficient to supply the demand if traffic conditions by sail and rail were satisfactory. The activity among planing mills is very decided, and dressed lumber is firm for all grades. The stockholders of the South Norfolk Company and of the Virginia Saw-Mill Co. held meetings simultaneously last week. Besides the transaction of routine business, the annual elections of officers for the companies were held. The officers elected for the South Norfolk Company are: Directors—E. M. Willey, Caldwell Hardy, W. H. M. Reed, Theophilus Tunis and D. Tucker Brooke. These, in turn, elected E. M. Willey, president; Caldwell Hardy, vice-president, and W. D. Hardy, secretary and treasurer. The same officers were elected to the same positions with the Virginia Saw-Mill Co., with the exception of Mr. W. H. M. Reed, whose place in the directorate of the South Norfolk Company is filled by Mr. W. D. Hardy for the Virginia Saw-Mill Co.

**Savannah.**

[From our own Correspondent.]  
Savannah, Ga., December 8.

The week under review has shown a fair volume of business in most departments of the lumber industry of this section. The demand from the usual sources continues very decided, and mills generally are rushed with orders. The heavy weather on the coast during the past ten days has checked the distribution of lumber to a great extent. The business in wood products so far this season has been of more than average volume, and since September 1, the opening of the new year, coastwise shipments amount to 48,500,000 feet. There is a steady demand for timber lands, and new concerns establishing enterprises are quite active in picking up desirable bodies of timber. The foreign demand for lumber is steadily improving, and numerous inquiries are being received from the United Kingdom and continental ports, as well as from the West Indies and South America. A new line of transatlantic steamers between Savannah and Bremen has been established, the line to be operated by the North German Lloyd Steamship Co. The first steamer, the Coblenz, has arrived, and will be followed by larger steamers as business warrants. The extensive lumber firm of E. B. Hunting & Co. of Baltimore, Md., having a branch in Savannah, will be succeeded on January 1 by the Granger-Stubbs Lumber Co. The new firm is composed of Mr. Harry Granger, the present manager of the Savannah office; Mr. Furney B. Stubbs and Mr. Sidney J. Stubbs of Macon, and Mr. C. E. Lewis of Baltimore, at present connected with the Baltimore office of E. B. Hunting & Co. The new company will have a capital of \$150,000, with headquarters in Savannah. The entire business will be under the management of Mr. Granger. The new concern will continue the present



offices at Baltimore, New York and Boston, which will be in charge of Mr. Lewis of the Baltimore office. The Messrs. Stubbs will have charge of the manufacture of lumber.

### Nashville.

[From our own Correspondent.]

Nashville, Tenn., December 8.

The conditions surrounding the local lumber market are considered quite satisfactory at the moment, and the volume of trade shows considerable expansion over the corresponding period a year ago. Buyers from Eastern and Northern points have been in the market during the past month and have been purchasing freely at the present scale of prices. The demand for oak and poplar is quite brisk, and for the latter wood there has been an advance in poplar squares, and 4x4 to 8x8 dry stock is held at outside figures. Quartered oak is also very firm, and for all other grades the market is steady. Ash is also in good request, with values well sustained, as in all other hardwoods on the market. At Memphis and throughout that section the hardwood situation is considered very encouraging, prices being firm throughout the general list. Wood-working plants are being established, and saw-mill operators are looking every week for desirable sites in that city and suburbs, while investors in timber lands are purchasing freely in the delta of the Mississippi and Arkansas. Some very large sales of timber lands have been closed during the past month, the largest purchasers being Memphis saw-mill men. Messrs. R. J. Darnell & Son of Memphis have acquired a tract of timber land in Quitman county, consisting of 10,000 acres. All the tracts which have been sold are well wooded with a large variety of commercial woods. Oak, ash, cypress and different varieties of gum abound in quantities considered profitable to mill operators.

### Memphis.

[From our own Correspondent.]

Memphis, Tenn., December 8.

The demand for everything in the hardwood list continued active during the past week, and the month of November was, all things taken into consideration, a good one. The most serious feature in lumber circles here now is the car shortage, which is greatly handicapping shippers who have stock ready to send out and no cars in which to do so. The railroads are completely unable to cope with the situation, and lumbermen are losing heavily as a result of this condition. This is particularly the case where they have contract deliveries to make, specifying the exact date of shipment. None of the lumbermen here have made a test case of the liability of the railroads for damages in cases of this kind, but the indications are that some such action will be taken in the near future. The situation has easily reached a point where patience has ceased to be a virtue. There was a meeting of the Memphis Lumbermen's Club a few days ago, at which a committee was appointed to investigate the situation and report back to the body, with recommendations as to the best course to pursue with reference to the railroads. This committee has not reported, and its action is awaited with interest by the lumbermen. The Cotton Exchange not only took action, but threatened to go into the courts to make the railroads pay damages on all losses already incurred, and on any other that might be incurred during the remainder of the period of car famine. The best demand throughout the list is for quartered white oak, which is selling all the way from \$52 to \$60 per thousand, according to dimensions, ranging from one to two inches in thickness. Next to quartered

white, ash is strongest, and plain red occupies third place in point of activity. There is a good call for poplar, which is rather scarce, and there is an active demand for cottonwood, which is very scarce, and which is now selling at a level never before heard of in this section of the country. Commons and culls are now bringing \$15 to \$16 per thousand f. o. b. Memphis, while firsts and seconds are going at \$21 to \$25 per thousand, with box boards ranging between \$27 and \$30 per thousand. The year has not been a good one for the getting out of cottonwood, and particularly has the last few months been unfavorable, on account of the scarcity of labor. The amount of logs offering is very small, and prices are high, \$9 to \$9.50 per thousand, which is another record price for the Mississippi valley. On the other hand, the demand from the box factories and wagon manufacturers is very large. The market for this wood has worked itself into such strong position that it is stated efforts will be made to substitute some other wood for this. The favorite candidate for the position of substitute is gum. This wood is comparatively cheap, and it bids fair to supersede cottonwood, just as the latter a few years ago displaced poplar because of the high price to which the latter rose. The demand for all classes of building material is active, and prices are well maintained throughout the list. There has been more building in progress during the past year than ever known, and this has given the sellers of building woods an excellent opportunity to dispose of their offerings at a good profit. The woodworking plants are all as busy as they can be, some of them running day and night in order to keep up with the volume of orders in hand.

### Lumber Notes.

The property of the Macon Sash, Door & Lumber Co. of Macon, Ga., was sold at public auction on the 2d. The Exchange Bank was the purchaser at \$8000.

The Italian ship Marina Madre was loading a cargo of 1,500,000 feet of lumber last week at Gulfport, Miss., for South America. The cargo was furnished by the S. A. Dantzler Lumber Co.

The Wheeler-McKean Lumber Co. of Ocala, Fla., has dissolved, Mr. Wheeler having bought out the lumber interest of Mr. McKean. The company will hereafter be known as the Wheeler Lumber Co.

The Memphis Lumber Co. of Memphis, Tenn., was incorporated last week, with a capital stock of \$5000. The incorporators are J. Martin Speed, F. J. Warner, Scott W. Moore and others. The company will engage in a general lumber business.

The Kansas City Lumber Co.'s plant at Lucedale, Miss., started in full blast last week. This is perhaps the largest mill on the Mobile, Jackson & Kansas City Railroad, having a capacity of nearly 100,000 feet of lumber a day, with a planing mill of equal capacity.

The Lion Furniture Co. of Columbia, S. C., was chartered last week, with a capital stock of \$10,000. The company will manufacture and deal in furniture. The officers of the company are E. G. Cook, president and treasurer; W. K. Cook, vice-president, and B. H. Mobley, secretary.

It is stated that C. F. Thompson of Chicago has purchased stock in the Kingston Lumber Co. of Laurel, Miss., and has been elected president of the company. It is the intention of the company to rebuild its saw-mill and fit it throughout with modern machinery, including band and gang saws.

The Southern Pine Product Co., operating at Fayetteville, N. C., has passed

under new management, and becomes the property of the Georgia Pine & Turpentine Co. Dr. F. S. Clark will superintend the enlargement of the capacity of the plant and the installation of new and improved machinery.

A party of Indiana capitalists visited Memphis, Tenn., last week to inspect the territory with a view to starting a wood-working plant in that city in the near future. The plant they contemplate establishing is a factory for buggy wood and general bending. The party after leaving Memphis will visit Lula, Miss, to inspect timber lands on which they have an option and contemplate purchasing for an investment.

The Chattanooga Boat Oar Co. of Chattanooga, Tenn., has recently doubled its capacity and made several important improvements. The product of the company consists solely of boat oars of all sizes, made principally of spruce and ash. Shipments of the product are principally to the seaboard, and exported to Liverpool, Havre, South America and South Africa. C. B. Rowe is general manager for the company.

It is stated that the Pendergast Lumber Co. of Chillicothe, Ohio, which recently secured the contract to furnish ties and bridge timbers for the Norfolk & Western Railroad, has purchased outright 1500 acres of timber lands along the Big Sandy extension of the road. The property is located in Wayne county, West Virginia, and is bounded by an unbroken forest consisting chiefly of oak and poplar. Extensive preparations are being made for its immediate development.

It is stated that a timber deal was closed at New Orleans on the 4th inst., when 850,000 acres of cypress land was sold to a Chicago syndicate headed by Thomas B. Lyons. The land stretches along Lake Pontchartrain from New Orleans to Hammond, a distance of forty miles. The new company will be incorporated as the Louisiana Cypress Lumber Co., with a capital of \$5,000,000, and will establish in the neighborhood of New Orleans one of the largest lumber plants in the South.

The lumber firm of E. P. Burton & Co. of Charleston, S. C., has asked for the help of the bureau of forestry in managing 60,000 acres of pine forest, about thirty miles northwest of Charleston, on the Cooper river. The company's mills have a capacity of 20,000,000 board feet a year, and the company wishes to know, among other things, whether the yearly increase in growth of its present forest is sufficient to supply its mills. If it should be found not to be sufficient, the company desires to know how many additional acres are required to make it so.

Ground was broken last week at Jacksonville, Fla., for the erection of a new saw-mill plant for the Standard Cypress Co. of that city. The plans of the structure have been prepared by the Allis-Chalmers Company of Milwaukee, Wis., and the erection of the mill will be under the direction of S. J. Gunn. The arrangements are for a complete saw-mill, a shingle mill and lath mill. The mill will be a single-board and resaw and lath and shingle mill, and will have a capacity of 40,000 feet of lumber a day. The mill is expected to be in operation not later than February 1, 1903.

Delegates representing the several associations in the lumber-manufacturing interests met in St. Louis on the 9th inst. and formed a national association. The objects of the association are to handle such vital questions as car supply and equipment, credits, uniformity in grades and gauges, etc. The associations represented are the Mississippi Valley Lumber-

men's Association, the Georgia Saw-Mill Association, the Northwestern Hemlock Manufacturers' Association, the Hardwood Manufacturers' Association, the Gulf Coast Lumber Association and the Southern Lumber Manufacturers' and the Pacific Coast Lumber Manufacturers' Association.

It is stated that Messrs. E. B. Hunting & Co., with principal offices at Baltimore and branches at Savannah, New York and Boston, the largest dealers in yellow pine in the South, will be succeeded on January 1, 1903, by the Granger-Stubbs Lumber Co. The new firm is composed of Mr. Harvey Granger, the present manager of the Savannah office; Mr. Furney B. Stubbs and Mr. Sidney J. Stubbs of Macon, formerly connected with the Bibb Land & Lumber Co., and Mr. C. E. Lewis of Baltimore, at present connected with the Baltimore office of E. B. Hunting & Co. The new company will begin with a paid-up capital of \$150,000, and will make its headquarters at Savannah. The entire business will be under the management of Mr. Granger. The new concern will continue the present offices in Baltimore, New York and Boston, which will be in charge of Mr. Lewis, who will reside in Baltimore. The Messrs. Stubbs will have charge of the manufacture of lumber.

The regular monthly meeting of the North Carolina Pine Association was held on the 2d inst. in Norfolk, Va. The affairs of the association were said to be in a very satisfactory condition, with stocks of lumber practically unchanged since the meeting thirty days ago. No change was made in the price-list, it being decided to allow the present scale to prevail for the next month. The association will be represented at the annual convention of the National Lumbermen, to be held at St. Louis, beginning December 6, by the following gentlemen recently appointed as delegates by President John L. Roper: Capt. John L. Roper, chairman; Messrs. E. C. Forburgh, George W. Roper, R. J. Camp of Franklin, R. H. Cohn, George W. Jones, Col. F. E. Waters of Baltimore and A. M. Tilghman of Washington, N. C. The meeting at St. Louis will be of great importance to the trade, as every lumber-producing section of the country will be represented.

The address delivered last March before the Tennessee division of the Sons of the American Revolution by Col. J. B. Killebrew of Nashville on the battle of Guilford Courthouse has been published in attractive pamphlet form. The address is a clear exposition of the significance of the battle of Guilford Courthouse in its momentous effects for the cause of American independence, for, although nominally a victory for the British, it shattered the plans of Cornwallis in the South, and was the forerunner of Yorktown. Colonel Killebrew tells the story entertainingly, with a full grasp of the many interesting details and a philosophic comprehension of all its circumstances.

Senator Louis E. McComas of Maryland is making a determined effort to secure at this session of Congress an appropriation for widening the main channel of Baltimore at a cost of \$5,300,000 if the width is to become 600 feet and \$10,000,000 if it is to become 1000 feet.

It is announced that the United States government has contracted with Col. C. P. E. Burgwyn of Richmond, Va., for the deepening of the Appomattox river from the shipyard of the Petersburg Iron Works to Sunken Island, a distance of seven miles.

## MECHANICAL.

## Davis Boiler Feed.

It is said that the Davis boiler feed, shown here in operation, will feed a boiler to a constant uniform water-level, regardless of the steam pressure or the quantity

users, and is a most desirable condition. The Davis feed is an application of the principle of gravity, regulated by novel appliances, which are substantial and simple in construction and positive in their action. It is placed above the boiler at any height over two feet and connected thereto, the top with the steam space and

automatically closed and water connections automatically opened, thus repeating the operation.

The machine consists of a cylindrical tank, a piston valve having one end of larger area than the other, a hollow cast-iron ball or displacing weight, a steam chest and counterpoise. The valve has a reciprocating motion, steam being supplied to the large end by a small piston valve and to the small end by a steam inlet. The displacing weight is fourteen inches in diameter, and when submerged displaces fifty-one pounds of water. It is

greed between two stops, and it comes against either one or the other, depending upon whether a horizontal or a vertical line is desired. These two stops are fastened to a protractor, and may be turned to any angle with the horizontal or vertical, thus permitting the scale to come against a stop at the desired angle, and also at right angles to it. The lower part of the protractor always lies in the same direction, no matter where it is moved about the board, and hence when the protractor is once set at any desired angle the scale will give parallel lines anywhere

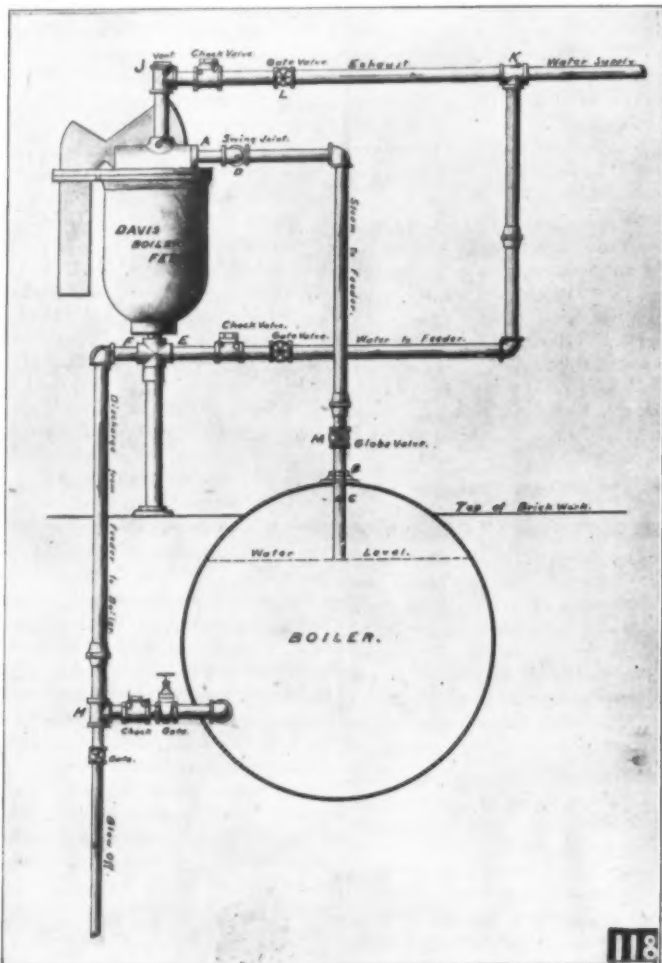


FIG. 1—DAVIS BOILER FEED CONNECTED TO A RETURN TUBULAR BOILER.

of steam being used. The only condition required is that the water shall be higher than the boiler or be under sufficient pressure to fill the machine. It will feed water of any temperature, and if water is cold it will heat it before feeding, thereby removing a large part of the scale-forming substance before the water enters

the bottom below the water-line. Water is automatically admitted to the tank by gravity (or pressure, which must not be greater than boiler pressure) at a time when the connections to the boiler are automatically closed.

When the tank is filled the water is cut off automatically, and the boiler connec-

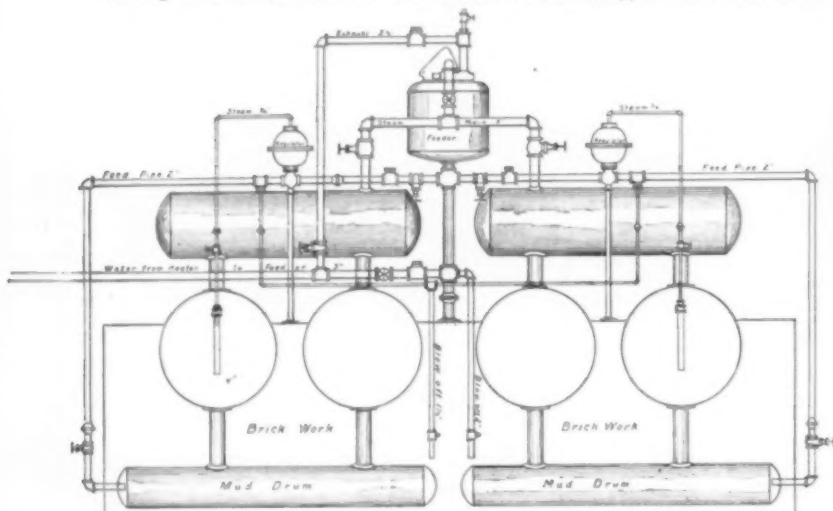


FIG. 2—DAVIS FEED APPLIED TO A BATTERY OF FOUR BOILERS.

the boiler. The machine adapts itself to the duty required of the boiler; that is, if only a small amount of steam is being used it will feed slowly, and if the boiler is being worked to its capacity it will feed faster, maintaining at all times a constant water-level. The value of a uniform water-level is well known by all steam-

tions at the same time opened both at top and bottom. As the water in the machine stands at a higher level than that in the boiler, and the pressure being equalized, it flows into the boiler with a velocity due to the difference in elevation. When the water has nearly all discharged into the boiler the boiler connections are again

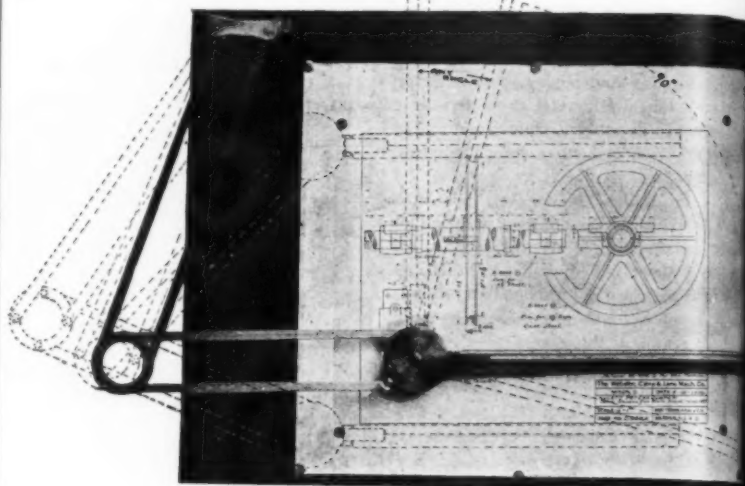


FIG. 1—UNIVERSAL DRAUGHTING MACHINE.

suspended on the end of a lever, which is attached to a shaft. The counterpoise is attached to the same lever, but directly opposite. The counterpoise is of such weight as to balance the displacing weight when it is half-submerged, so that the power exerted by the displacing weight when the tank is empty is twenty-five and one-half pounds on the end of the lever, and an equal power is exerted by the counterpoise when the displacing weight is submerged.

These boiler-feeding systems are for

on the drawing. This is accomplished by the two parallelograms, which act similarly to a parallel ruler.

The protractor may be clamped at any angle by means of a thumb-screw.

A spring stop is provided for the 0, 30, 45, 60 and 90-degree angles, and is operated by merely raising it and allowing it to drop into the hole for the angle desired.

The general use of this device is exactly the same as the use of a scale without any attachment. Either a triangular or a flat scale may be used.

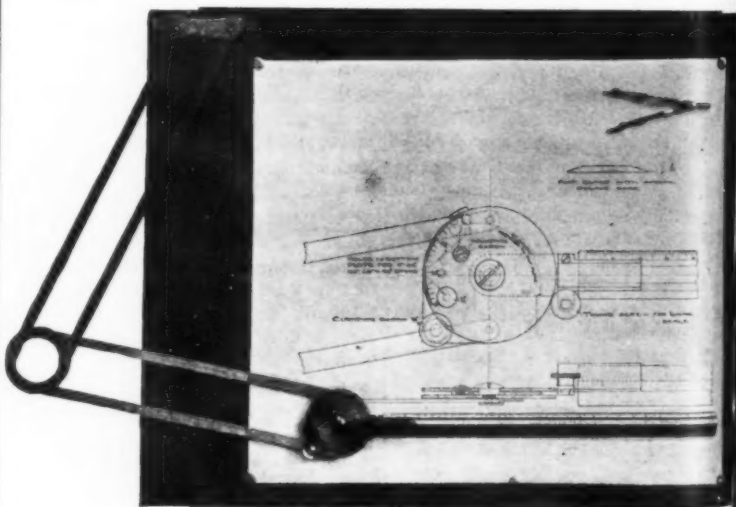


FIG. 2—UNIVERSAL DRAUGHTING MACHINE.

sale by Moore & Handley Hardware Co., Birmingham, Ala.

## Rapid Sketching Device.

To the men at the drawing-board and to the designers who must make fast sketches the rapid sketching device here illustrated and described will be of special interest. It should save an endless amount of work and thought and worry.

The rapid sketching device consists of a scale, joined to a protractor, which is anchored to the upper left-hand corner of the board by means of an arm made of two pivoted parallelograms.

The scale has a free motion of 90 de-

The scales chuck into place, and may be turned so that any edge may be used.

The triangular scale has the advantage of giving a larger variety of graduations on one piece, while the flat scale has the advantage of giving a better ruling edge.

The joints of this machine are hardened and ground, and with the very slight pressure and speed they should last for a long time. The pin for the stops is made conical, compensating for wear. All parts are finished in dull nickel with the exception of the rods, which are coppered and oxidized. The instrument is well proportioned, is well finished, and has a very neat appearance.

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The Universal Drafting Machine Co., Blackstone Building, Cleveland, Ohio, is the maker.

#### Braun's Vault Light.

Braun's patent vault light is here illustrated. This light is furnished with or without a universal safety tread, insuring safe footing in the most slippery weather.

The steel construction of Braun's vault light is formed with two Z bars attached to opposite sides of the opening, which

During a business career of more than sixty years it has been the constant aim of this firm to improve its goods in every possible way, and the pleasant relations existing between it and its customers justifies a belief in its success.

The safety of Dietz lanterns is one of the points guaranteed, and whether the lamp be the cheapest or most expensive lamp in the stock, the maker guarantees it to be safe.

The oil pots of all tubular lamps of this

ning is the result of forty years' experimenting and experience in this business. This dressing, the manufacturer claims, makes the belt soft and pliable, fills its pores, causing it to adhere closely to the pulley, thereby increasing the driving power of the belt and prolonging its life.

The leather is surface-tanned only, the interior of the hide, its fiber, is rawhide, thus allowing the advantages of tanned leather with the toughness and strength of new rawhide.

It will contain sixty fine offices above the first floor. Three of these offices have been taken by the Southern States Trust Co., Mr. Stuart W. Cramer, Southern agent for the Whitin Machine Works, Whitinsville, Mass., and the real estate and brokerage firm of F. C. Abbott & Co., sole agent for the Piedmont Realty Co.

In the rear of the office building and approached through the main entrance and 12-foot marble hallway, already mentioned, is the Academy of Music, said to

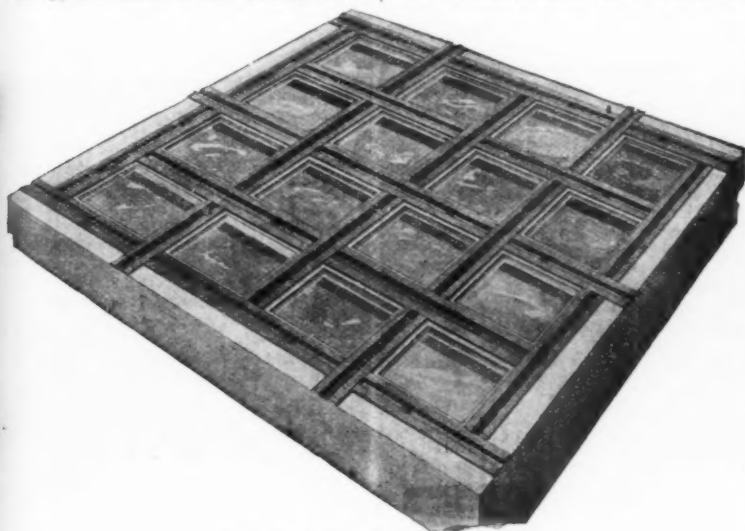


FIG. 1—BRAUN'S VAULT LIGHT.

support 60-degree angles. Across these are laid metal steel strips, and the plain or prism glasses are then placed in position, as shown in the illustrations. This leaves a trough on each side of the prisms, which is filled with concrete, forming a smooth surface with the top of the glasses. With this construction any size or shape of opening may be covered without the delay or expense of special castings. The safety tread may be easily attached after the cement has been laid by means of the "Diamond" expansion bolt.

This vault light is manufactured and set by the New Jersey Foundry & Machine

make are drawn up from a solid sheet of tin and the bottom plate set in. This ensures lasting qualities. The material used is of the best quality, and selected especially with a view to its suitability to the part into which it is to be made. The burners are stiff and strong, and the globes of extra quality, carefully selected, made from especial models to fit each lantern.

#### Shultz Belting Co.

For the manufacture of patent rawhide lace belting, the Shultz Belting Co., St. Louis, Mo., has three buildings, 225x146



SHULTZ BELTING CO.'S PLANT.

Since the enlargement and installation of improved stretching machinery the plant of this company is more than ever a thoroughly up-to-date tannery and belt factory.

#### Charlotte Academy of Music.

The new office building and academy of music in Charlotte, N. C., an illustration of which is shown here, was built by the

be one of the finest south of Washington, and already leased for five years to Richmond parties.

The Piedmont Realty Co. is developing suburban property surrounding Charlotte, and during the past year has succeeded in getting an extension of the car line through this, and including the township trustees to connect it with the city by means of an arched concrete bridge. City

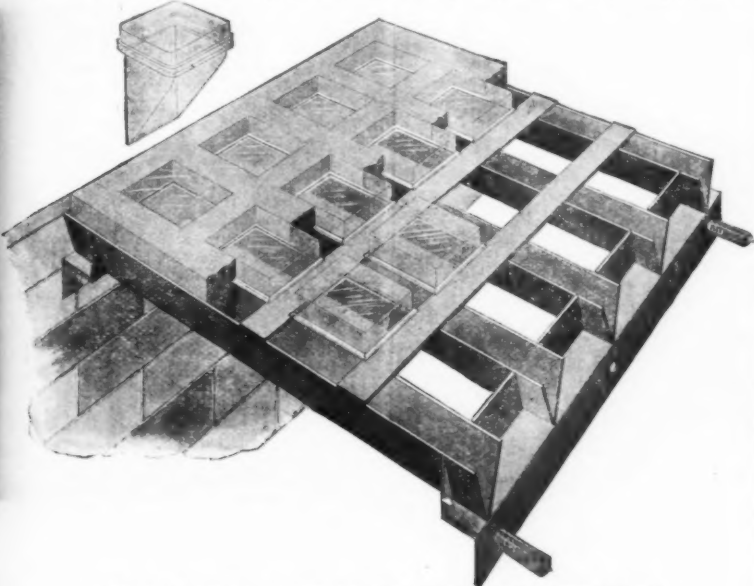


FIG. 2—BRAUN'S VAULT LIGHT, SHOWING CONSTRUCTION.

Co., 9 to 15 Murray street, New York, and is sold under the trade name "Newhall."

#### Dietz Lanterns.

From the ordinary barn and wagon lantern, carried below the dashboard on wagons and carts, to the headlight on a locomotive, lamps and lanterns of every shape, size and requirement are manufactured by the R. E. Dietz Company, manufacturer of the well-known Dietz tubular lanterns, headquarters in London, New York and Chicago.

feet, 80x130 feet and 54x130 feet, with which a daily capacity of 300 hides is possible. The plant is equipped throughout with modern machinery.

This factory has recently been thoroughly overhauled, vastly improved and enlarged to more than twice its former capacity.

For the preparation of belting and lace leather only the heaviest packer steer hides are used. The Shultz Company manufactures these by its own patent process. The dressing used in the tan-

Piedmont Realty Co. of Charlotte, and is conceded to be one of the finest buildings in the Carolinas. It is located in a busy section of the city, and aside from being an ornament to Charlotte, is a credit to the builder. The building is heated by steam, fitted for gas and electric lighting, and will have fast-running elevators.

The entrance is strikingly handsome, with its massive granite columns, broad marble stairway and mosaic tile landings.

water and complete sewerage have also been secured. The company has further announced its intention of building a modern high-grade hotel in Charlotte. A new issue of \$100,000 worth of stock has been authorized, and as soon as a sufficient quantity is sold the work will begin.

The authorized capital stock of the company is \$300,000. Mr. B. D. Heath is president, and Mr. F. C. Abbott, treasurer and general manager.

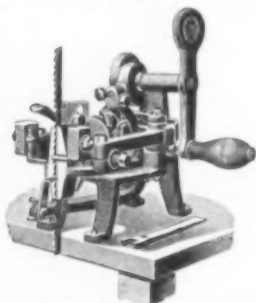


NEW ACADEMY OF MUSIC, CHARLOTTE, N. C.

**Equal-Blow Setting Machine.**

With the equal-blow setting machine illustrated here two teeth are set, one in either direction, by two hammers which are pressed by the same spring, and which strike with equal force at the same time.

Blades are left straight, and there is lit-



EQUAL-BLOW SETTING MACHINE.

tle chance for buckling them or of breaking off teeth.

The saw passes through a spring-pressed vise, the jaws of which hold it firmly, but yield when the saw is fed or drawn upward. If the saw is of uneven temper, it is only necessary to adjust the movable stops. The amount of set is con-

manufacturer of elevating, conveying and power-transmission machinery.

The conveyor is desirable for plants of small as well as large capacity.

It consists, principally, of three parts—the endless carrier chain, the swinging basket and the overhead track or runway. It can be disconnected at any point and sections run in any direction, while the overhead track is constructed to such points in and about the yard as will best serve the distribution of the brick.

It is moderate in first cost, simple in construction, repairs are few and easily made; it is said to increase yard storage capacity 100 per cent., and to effect a saving in the cost of handling brick from 25 per cent. to 50 per cent.; the proportion of broken brick is considerably reduced. By its use the conditions of the weather are practically overcome, making it possible to do continuous work.

**Cabinet or Smoothing Surfacers.**

The cabinet or smoothing surfacer illustrated here is designed to do the finest of smoothing work.

The frames are built in box form, cored out. The bed is raised or lowered on inclined planes, which are long and support



THE BARNEY BRICK CONVEYOR.

tinually in view of the operator, and can be increased or diminished by adjusting screws with regular force or the blow or travel of the hammers.

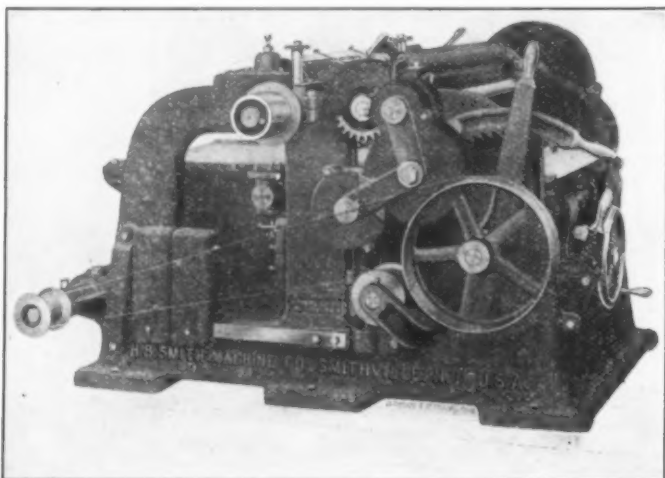
Blades are set without removing from the machine or at the bench as desired. An ordinary saw may be set, it is said, in from three to five minutes.

The New Britain Machine Co., New

it the entire length of the feed rolls and cutterhead. The bed has both a power and hand hoist.

The outfeed roll is driven by an all-steel roller link chain from the infeed roll, giving a direct and steady action and gear strength.

The illustration shows the compound gear casings, with outside bearings.



CABINET OR SMOOTHING SURFACER.

Britain, Conn., is the maker of this device.

**Barney Brick Conveyor.**

The accompanying illustration shows a view of the Barney brick conveyor, manufactured by the Jeffrey Manufacturing Co., Columbus, Ohio, the well-known

The cutterhead is made of a steel forging, with the journals drawn out from the block. Both bearings are two inches in diameter and eleven inches long.

The H. B. Smith Machine Co., Smithville, N. J., is the maker.

Subscribe to the Manufacturers' Record. Price \$4 a year, or six months for \$2.

**TRADE NOTES.**

**Large Filter.**—A. B. Warman of the Lackawanna Laundry, Scranton, Pa., has placed an order with the New York Continental Jewell Filtration Co., Mills Building, New York city, N. Y., for a large filter for use in its laundry.

**Florida Land for Sale.**—E. Suskind, Jacksonville, Fla., has 1500 acres of white cedar land in Western Florida for sale. This has excellent water transportation facilities, and it is thought would be especially suitable for the cultivation of rice after clearing.

**Admitted to Partnership.**—Mr. J. Beyers Holbrook, M. E., has been admitted to partnership with Charles Henry Davis & Partners, engineers and architects, 25 Broad street, New York, as that firm's heating and ventilating engineer. Charles Henry Davis & Partners have offices in New York, Philadelphia and Boston.

**Strength and Simplicity.**—An important feature of the Olds gas or gasoline engines is the large diameter and strength of the crankshafts. These parts are all solid steel forged. The simplicity of the "Olds" engines is a valuable feature. Anyone with slight experience may run one successfully. Olds Motor Works, 222 River street, Lansing, Mich., is the maker of this engine.

**Timber for Sale.**—To liquidate the business of an English syndicate, 10,000 acres of good hardwood and pine timber land will be sold at a sacrifice. This is located on a railroad in Calcasieu parish, Louisiana, and will be sold at \$3.50 per acre. It is estimated that this land runs 7000 feet of lumber to the acre. William Briggs, mayor, Lake Charles, La., will furnish further information.

**Water-Tube Boiler.**—A new boiler has been patented by M. H. Plunkett of Baltimore, State examiner of stationary engineers. The boiler is of new type, for which the inventor claims high efficiency, due to perfect circulation, and large heating surface. Mr. E. P. Cooke, draughtsman, of Baltimore, designed and improved the invention to meet the requirements of ideal boiler construction.

**Sale of Rebuilt Equipment.**—The Hicks Locomotive and Car Works, 277-285 Dearborn street, Chicago, Ill., has closed, through Mr. F. M. Hicks, contracts for rebuilding railroad equipment for the following parties: Wrightsville & Tennille Railroad, Interurban Railway, Sumter & Choctaw Railroad, American Bridge Works, Pittsburg, Pa.; Tombstone Consolidated Mines Co. of Congress, Ark., and others.

**Fourth Order of Hawley Furnaces.**—Cumberland Electric Light Co., Nashville, Tenn., is adding 1800 horse-power of Hawley down-draft furnaces, making 3900 horse-power of B. & W. boilers and Hawley furnaces in its boiler-room. This is a fourth order of Hawley furnaces it has placed in three years. The Atlanta office of the Hawley Down-Draft Furnace Co., 316 Empire Building, Atlanta, Ga., made these sales.

**Southern Representative.**—Robert Ross Zell, engineer and contractor, Birmingham, Ala., is the representative in the South for the American Guarantee Co. of Chicago, whose business is especially to guarantee industrial securities, to enable parties issuing same to sell them at par. Mr. Zell has just closed a contract for the guaranteeing of \$25,000 worth of bonds for the Beatrice Coal & Mining Co., Spring City, Tenn.

**New Building.**—John A. Waters & Co., 13 1/2 and 17 1/2 South Eighth street, Richmond, Va., dealers in general machinery, engines and boilers, have been conducting a very extensive business, and have found it necessary to enlarge. They have just finished the erection of a \$10,000 building in Manchester, equipped with overhead tramways and other improved and labor-saving devices, making their plant now more improved and modern than it has yet been.

**Electric Watchman's Clock.**—The Eco Magnet Clock Co., Boston, Mass., Southern department National Clock Manufacturing Co., Empire Building, Atlanta, Ga., is the manufacturer of an electric watchman's clock which is approved by the underwriters, covers insurance requirements and is endorsed by the national board. The clock has no battery, is sure in action, little or no trouble, is inexpensive to maintain and install, and is covered by a five years' guarantee.

**Removal.**—Owing to the rapid growth and steady increase of its business, the H. J. Reedy Co. has been compelled to move to larger quarters at 59, 61, 63, 65 and 67 Elm street and 201, 203, 205 and 207 Commerce street, Cincinnati, Ohio. Facilities for hand-

ling work in the new quarters are much improved. The capacity is now double the former capacity of the establishment. The H. J. Reedy Co. is an extensive manufacturer of elevators for electric, hydraulic, steam or hand power, and for passengers or freight of all types.

**Audit Company of New York.**—The Manhattan Railway Co. was leased to the Interborough Co. after careful consideration of engineers' reports and the report of the Audit Company of New York, 43 Cedar street. The Audit Company made a careful examination of the accounts and statistics from the operating as well as the financial point of view. The company also made a thorough investigation into the records of the American Bicycle Co., and it is said to be largely as a result of this investigation that the reorganization committee, of which William A. Read is chairman, is preparing its plan.

**Bowser Oil Cabinet.**—The Bowser adjustable measure oil cabinet is especially designed for the storage and handling of lubricating oils. As the name indicates, it is an oil cabinet equipped with a self-measuring pump with adjustable measure, which can be changed at pleasure. It is intended for use in factories, shops, cotton mills, saw-mills, electric-power plants and engine-rooms for storing oil and automatically measuring it into the oiler in general use about the plant. The device is said to be economical and safe, claims which are substantiated by the testimonials of many well-known firms whose plants have been equipped with them. This cabinet is the product of S. F. Bowser & Co., Fort Wayne, Ind.

**A Thriving Industry.**—Sherwood Bobbin & Manufacturing Co., Greensboro, N. C., manufactures speeder and slubber bobbins, skewers, warper spools and warped and filling bobbins. The company is now at work on a large order of filling bobbins for shipment to Alabama, and has recently shipped orders to many mills all over the South. The plant is well equipped with machinery of the latest pattern, thereby saving labor and handling, which enables it to sell its product at reasonable prices. The Sherwood Bobbin & Manufacturing Co. has a large lumber-drying kiln with a capacity of half a million bobbins, and large sheds for air-drying materials. Prospects for an increasing business this winter are very good.

**Sale of Generators.**—The Crocker-Wheeler Company, Ampere, N. J., manufacturer of electrical machinery, sold during November engine-type generators as follows: One 400-kilowatt to the Steven Girard Building, Philadelphia, Pa.; one 100-kilowatt and one 125-kilowatt to the Missouri Pacific Railway, St. Louis, Mo.; two 150-kilowatt to the Pennsylvania Malleable Co., McKees Rocks, Pa.; one 200-kilowatt to J. L. Mitchell, Philadelphia, Pa.; two 50-kilowatt to the Liveright & Greenwald Building, Philadelphia, Pa.; two 100-kilowatt to the McClintic-Marshall Construction Co., Pottstown, Pa.; one 300-kilowatt to the Grand Crossing Tack Co., Chicago, Ill.; one 400-kilowatt to the Lake Construction Co., Erie county, Pennsylvania; one 250-kilowatt to the Wilmington City Electric Co., Wilmington, Del.; one 225-kilowatt to the Pine Bluff & Western Railway, Pine Bluff, Ark.; two 150-kilowatt, one 250-kilowatt and one 75-kilowatt for the Woodward & Lothrop Building, Washington, D. C. The new mill building of the Crocker-Wheeler Company is now being occupied, increasing floor space by 60,000 square feet, giving facilities for prompt deliveries on large orders.

**Ball Engines.**—The Ball Engine Co., Erie, Pa., recently installed a 125-horse-power engine in the electric plant belonging to Farmville, Va., and a 100-horse-power engine for the Lord & Burnham Co., Irvington, N. Y.

Mr. W. M. Buchanan, Odell, Ill., recently purchased a 150-horse-power direct-connected engine.

C. C. Mengle, Jr., & Bros. Co. of Louisville, Ky., has purchased a direct-connected unit for electric purposes.

The Mangus Metal Co. of Chicago is installing an electric-power plant, consisting of 150-horse-power vertical engine and a 60-horse-power horizontal.

The Chartier Brewing Co., Carnegie, Pa., purchased a direct-connected unit, consisting of an engine and a 30-kilowatt Westinghouse generator.

The Northern Electric Manufacturing Co. of Madison, Wis., recently placed in operation a 125-horse-power engine direct-connected to a Northern generator of 75 kilowatt.

The city of Fayetteville, N. C., installed a 125-horse-power engine in its electric plant.

The Ball Engine Co., Erie, Pa., supplied these engines.



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Alabama City—Water-works.—R. A. Mitchell contemplates the construction of water-works.

Attalla—Electric-light Plant.—City will establish electric-light plant. Address "The Mayor."

Birmingham—Real Estate.—Chartered: Southern Co-operative Home Purchasing Co., capitalized at \$50,000, by John D. Wilson of Michigan, G. Caldwell Main and Jasper E. Underwood of Birmingham.

Birmingham—Coal Mines.—H. F. De Bardeleben, J. L. Dillen and A. C. Vigo have incorporated Cane Creek Coal Co., with capital stock of \$200,000, and will develop coal lands.

Birmingham—Hardware Company.—Incorporated: Moore & Handley Realty Co., capital \$300,000, by James D. Moore and B. F. Moore of Birmingham and W. A. Handley of Roanoke, Ala.

Birmingham—Woodworking Plant.—Quarrior Manufacturing Co., reported last week with \$100,000 capital, will manufacture sash, doors, blinds, stairways, etc. It has a plant in operation.

Birmingham—Bottling Plant.—Solon Jacobs, J. H. Dean and E. A. Fox have incorporated Mineral Water & Supply Co., with capital stock of \$15,000, to bottle waters, etc.

Birmingham—Lime Works.—P. G. and M. Z. Hanahan of Birmingham and J. R. Hanahan of Charleston, S. C., have incorporated Keystone Lime Co., with capital stock of \$25,000, to manufacture lime.

Demopolis—Sewerage System.—City will expend from \$15,000 to \$20,000 for construction of sewerage system. Plans and specifications have been obtained. Address "The Mayor."

Ensley—Steel-car Plant.—Plans have been prepared by Southern Car & Foundry Co. (offices at Birmingham) for construction of its proposed steel car erecting plant, to have a daily capacity of twenty-five cars. A final determination as to location has not been made, but it will probably be built at Ensley, work to begin as soon as plans are perfected. About \$250,000 will be the cost.

Eulaton—Stove Foundry.—Eulaton Foundry Co. will build the stove foundry reported

last week. Letters can be addressed care Box 176, Anniston, Ala.

Jasper—Saw-mill, Timber Lands, etc.—Charles J. Winston, Charles J. Gilbert, Neal Brown and J. H. Koehler of Michigan have purchased from the Jasper Land Co. 30,000 acres of timber land near Jasper at about \$400,000. They propose the development of the property by erection of saw-mills, establishment of colonies, construction of railroad, etc.

Jasper—Electric-light Plant.—J. M. Crawford and associates have secured franchise and will build electric-light plant to cost about \$20,000. Contracts have been awarded for 125-horse-power engine and boilers, 2000-light generator, etc.

Mobile—Pickling Plants.—It is reported the H. J. Heinz Company of Pittsburg, Pa., will establish several salting plants near Mobile at a cost of \$2500 each. These plants are to treat vegetables and pack same in tanks ready for shipment to Heinz pickling plants for final preparation for market.

Mobile—Lumber Plant.—Crescent Lumber Co., reported incorporated last week with \$20,000 capital, has acquired an established plant, which will be enlarged and improved. Contract has been let for full band-saw outfit. Increased capacity will be 200,000 feet daily, sawing soft and hard woods. E. H. Roseberry, general manager, is in charge.

Mobile—Oil Wells.—Metropolitan Oil Co., chartered recently, has organized, with Geo. S. Leatherbury, president; Chas. A. Cunningham, treasurer, and H. M. Sossman, secretary. Contracts have been let for drilling oil wells. Capitalization is \$40,000.

Montgomery—Fertilizer Plant.—John W. Huger is organizing a \$1,000,000 stock company to build fertilizer factory. Hickman (Tenn.) and South Bend (Ind.) capitalists will be interested.

Oakman—Coal Mines.—Mississippi River & Cannel Coal Co. has been organized, with capital stock of \$50,000, to develop several thousand acres of coal land in Walker county; George Clifton of Greenwood, Miss., president; W. J. Francis of Cincinnati, Ohio, secretary, and John M. Kirkwood of New Orleans, La., manager.

Tallassee—Water-power Plant.—Montgomery Water-Power Co. has received its 4500-horse-power plant from the contractors. It is also announced that Emerson McMillan & Co. of New York have merged their interest in company with Montgomery Light & Power Co., and the combined properties will be operated after January 1 as the Montgomery Light & Water-Power Co. Charter has been obtained in New Jersey, capital stock being \$2,000,000, and privilege being retained of issuing \$3,000,000 in bonds. W. F. Maulsby will be secretary.

Union Springs—Electric-light Plant.—City intends to enlarge its electric-light plant. Address "The Mayor."

Wedowee—Kaolin and Mica Mines.—James M. McBurnett has secured and will develop 10,000 acres of kaolin and mica lands.

## ARKANSAS.

Arkansas—Electric-light and Power Plant. Columbia Light & Power Co. has been incorporated, with capital of \$15,000, to build electric plant for furnishing light and power. Joe L. Davis is president; James E. Walker, vice-president, and Robert L. Moore, secretary.

Camden—Oil and Soap Works.—Chartered: United Oil & Soap Co., capital stock \$100,000, with John G. Taylor, president; Willard White, vice-president and treasurer; H. S. Powell, secretary.

Earl—Manufacturing, etc.—Chartered: Southwestern Improvement Co., capitalized at \$10,000, for manufacturing and other purposes. J. W. Mallory, Jr., is agent.

Hoxie—Electric-light and Water Plants.—S. C. Dowell of Walnut Ridge, Ark., reported last week under Walnut Ridge, and associates have franchises for electric-light plant and water-works at Hoxie also, and will establish plants to supply both towns.

Huntington—Coal Lands.—Capitalists have purchased for development 3200 acres of coal lands at about \$400,000. T. W. M. Boone, Harry Salis and others of Fort Smith, Ark., made the sale.

Searcy—Real Estate.—Chartered: Searcy Real Estate Co., capital stock \$10,000; L. E. Moore, president; H. A. Smith, secretary, and D. W. James, treasurer.

Yellville—Mining.—Tippecanoe Mining & Milling Co. proposes to expend about \$50,000 for developing mining properties. Arthur W. Hickman is agent.

## FLORIDA.

Fernandina—Sewerage System.—City has adopted plans and specifications by Roland Woodward of 23 Main street, Jacksonville, for its proposed sewerage system. About \$25,000 will be expended. Bids are now invited.

Jacksonville—Mercantile.—Chartered: Bond & Bours Company, capitalized at \$75,000, by John S. Bond, James E. Bours and Henry Gaillard.

Jacksonville—Mercantile.—Chartered: W. A. Merryday Company, capitalized at \$10,000, by W. A. Merryday, L. H. Merryday and S. J. Barston.

Jacksonville—Lumber Plant.—Standard Cypress Co. has begun erection of proposed saw-mill to have daily output of 40,000 feet. Buildings will be erected for saws, shingle machines and lath machines.

Okahumpka—Foundry and Machine Shop.—J. P. Moser will establish machine shop and foundry.

Zolfo—Packing-house.—G. A. Smith will build packing-house.

## GEORGIA.

Atlanta—Telegraph Systems.—Postal Telegraph-Cable Co., C. C. Adams, general superintendent, is preparing to expend about \$500,000 for improvements and extensions of its systems throughout the South. Materials are now being secured, and construction work will begin in the spring of 1903.

Columbus—Water-works.—City has voted affirmatively on the proposed issuance of \$250,000 in bonds for the construction of water-works. Address "The Mayor."

Covington—Cotton Mill.—It is reported W. C. Clark, N. S. Turner and C. H. White have purchased water-power property near Covington, and will build \$200,000 cotton mill.

Cuthbert—Cotton-oil Mill.—T. J. Preston, Jr., of Eastman, Ga., represents the Northern capitalists mentioned last week as to build \$100,000 cotton-oil mill at Cuthbert.

Forsyth—Mercantile.—A. M. Taylor, P. S. Taylor and others have incorporated Stewart-Taylor Company, with capital stock of \$3000.

Gainesville—Cotton Mill.—Gainesville Cotton Mills proposes increasing capital stock from \$500,000 to \$550,000.

Griffin—Water-works.—City is contemplating, it is rumored, the extension of its water system. Address "The Mayor."

Plains—Mercantile.—Chartered: French-Spann Company, capitalized at \$20,000, by E. French, W. H. Spann and others.

Sandersville—Electric-light Plant.—City contemplates expending about \$15,000 for construction of electric-light plant, and has appointed committee to investigate. An election will be called to vote on the expenditure. Address "The Mayor."

Savannah—Lumber Plants.—Granger-Stubbs Lumber Co. will be incorporated, with capitalization of \$150,000, to succeed E. R. Hunting & Co. of Baltimore, Md. The new company will purchase and establish its own mills throughout the South and establish headquarters at Savannah. F. B. Stubbs and Sidney J. Stubbs of Macon, Ga.; H. Granger and C. E. Lewis of Baltimore will be the incorporators. Address either Granger or Lewis, care E. B. Hunting & Co., Calvert Building, Baltimore, Md.

Summerville—Water-works.—It is rumored the city will construct water-works and sewerage system. Address "The Mayor."

Waycross—Manufacturing.—Chamber of Commerce is negotiating for the location of a \$100,000 factory.

Waynesboro—Telephone System.—W. E. Jones, P. L. Corker, C. W. Skinner, P. D. Langdon and others have incorporated Waynesboro & Strowger Telephone Co., with capital stock of \$6000, to establish telephone system.

## KENTUCKY.

Bath County—Oil Developments.—G. Chiers and Rev. D. A. Mueller of Detroit, Mich., have optioned 33,000 acres of oil lands in Bath, Lincoln and Morgan counties, and propose organizing \$600,000 company to develop same.

Danville—Electric-light Plant.—City council has authorized committee to engage an

engineer to make surveys and estimates for construction of the proposed electric-light plant. Address "The Mayor."

Frankfort—Ice Plant.—Chartered: Crystal Ice & Storage Co., capitalized at \$25,000, by F. B. Moore, John Kobs and L. N. Farris.

Harlan County—Coal Mines.—Reports state that N. B. Dotson of Wise county, Virginia, and E. T. Harman, president Pocahontas (W. Va.) Coal Mining Co., have purchased 10,000 acres of coal lands in Harlan county from S. W. Bramblett of Carlisle, Ky., for \$240,000.

Junction City—Flour Mill.—James D. Shelby contemplates organizing company to build flour mill.

Knott County—Saw-mills.—It is reported Samuel Pardee, Drexel Building, Philadelphia, Pa., has purchased 3000 acres of timber land in Knott county, and will build saw-mills on the tract.

Lawrenceburg—Water-works.—City will issue \$30,000 in bonds for construction of the water-works recently noted as contemplated. Address "The Mayor."

Lexington—Electric Lighting.—City is asking sealed bids on lighting the streets with lamps of 2000 candle-power, according to specifications now ready. H. T. Duncan is mayor.

Louisville—Trunk Company.—Chartered: Chilton-Guthrie Trunk Co., capitalized at \$25,000, by Louis Dinkelspiel, Samuel Lazarus, Adolph Hays and Joseph Dinkelspiel.

Louisville—Fertilizer Plant.—Currie Fertilizer Co. will rebuild its extensive plant recently burned. Chas. E. Currie is engineer in charge. No contracts have been let.

Morgan County—Coal and Timber Developments.—Dispatches state that Brooklyn and Buffalo (N. Y.) capitalists have arranged to purchase and develop several thousand acres of coal and timber lands in Morgan county. It is said \$500,000 will be paid for the property. E. B. Carr of Philadelphia, Pa., is said to be conducting the negotiations.

Olive Hill—Brick Works.—Olive Hill Fire-Brick Co. will increase capital stock from \$50,000 to \$150,000.

Owensboro—Barrel Factory.—Phil N. Steinberg of Huntingburg, Ind., contemplates the erection of a slack-barrel stove factory.

Owensboro—Water-works.—City contemplates issuing \$200,000 in bonds for construction of water-works. Address "The Mayor."

Paducah—Handle Mill.—G. B. Lesh Manufacturing Co. of Warsaw, Ind., contemplates building branch handle mill at Paducah.

Sanders—Gas and Oil Wells.—Sanders Oil & Gas Co. has been incorporated by B. W. Ransdell, J. M. Mason, L. D. Alexander, Eli Cotton and others, to drill for gas and oil. Capital is \$1500.

Sandersville—Liquor Company.—Chartered: Stoll & Co., capitalized at \$600,000, by James S. Stoll, George J. Stoll, Samuel C. Stofor and others.

Sturgis—Coal Mines and Coke Ovens.—Hillman Iron Co. of Grand Rivers, Ky., has begun development of coal mines near Sturgis, and will build 200 coke ovens on the properties.

Tradewater—Coal Mines.—It is reported W. W. Smith of Sturgis, Ky., has purchased and will develop 1000 acres of coal land near Tradewater.

Winchester—Handle Factory.—John W. Williams of Ashland, Ky., will organize company to build handle and spoke factory.

## LOUISIANA.

Lake Charles—Sewerage System.—City has received plans and specifications from John N. Maxcey, engineer, of Houston, Texas, for the proposed sewerage system. It is proposed to expend about \$240,000. Address "The Mayor."

Lake Charles—Rice-mill Machinery Works. Geiser Manufacturing Co. of Baltimore, Md., will establish branch rice-mill machinery works, erecting its own buildings. J. H. Caldwell is local representative.

New Orleans—Flour Mill.—H. T. Lawler contemplates building flour mill.

New Orleans—Funeral Directors.—Chartered: Maxwell Company, Ltd., with capital stock of \$25,000; Jos. H. Burns, manager.

New Orleans—Lumber Plant.—Thomas B. Lyons of Chicago, Ill.; Danaher Bros. of Luddington, Mich.; Joseph Radford and Thomas Keet of New Orleans and others

have completed purchase of 850,000 acres of timber land, located along Lake Pontchartrain from New Orleans to Hammond, La. Cypress Lumber Co. will be organized, with capital stock of \$5,000,000, to build lumber plants and cut the timber for market. Mr. Lyons is registered at "The St. Charles," New Orleans.

New Orleans—Furniture Factory.—James W. Bledsoe of West Point, Tenn., has purchased manufacturing site at New Orleans for \$40,000, and will build, it is reported, a furniture factory.

Opelousas—Steam Laundry.—F. P. Butler and associates will establish steam laundry.

#### MARYLAND.

Annapolis—Machine Shops.—Baltimore, Washington & Annapolis Railway Co. intends erecting machine shops and car sheds. Plans have been prepared for one-story brick building 180x80 feet in dimension. Estimated cost is \$25,000.

Baltimore—Commission Firm.—Howard O. Buffington & Co. has been incorporated by Howard O. Buffington, Robert N. Stevens, John J. Buffington, James W. Stevens and James W. Chapman, Jr. The capital is \$5000.

Baltimore—Iron Works.—James J. Lacy & Co., proprietors of Industrial Iron Works, Block and Will streets, are enlarging the plant by building an addition fifty feet square. It will be an annex to the foundry, and will be used for making castings for marine engines and builders' supplies.

Mt. Savage—Coal Mines.—Chartered: Brailer Mining Co., by George C. Brailer, David Brailer, Joseph Miller, Polycarp Bgaler, Rose Brailer and Theresa A. Brailer, with a capital stock of \$20,000, to develop coal lands.

Mt. Savage—Coal Mines.—Cumberland Basin Land Co. of Baltimore, Md., has purchased for development large tracts of coal lands near Mt. Savage.

Upper Marlboro—Cannery.—Roberts Bros. of Baltimore will establish cannery.

#### MISSISSIPPI.

Anguila—Oil Mill.—Daniel L. Moore of Harrodsburg, Ky., has purchased for himself and Lewis Ferguson of Louisville the Anguila Cotton Oil Mills; will enlarge and operate the plant.

Cold Springs—Cotton Mill.—E. H. Easterling and Felix May of Jackson, Miss., are organizing \$250,000 company to build cotton mill.

Doloroso—Mercantile.—Incorporated: Doloroso Mercantile Co., capitalized at \$7000, by M. H. Rothschild, Ernest A. Kampf and others.

Flowerce—Saw-mills.—James Vent, F. V. Blatus and H. C. Hanlin, all of Illinois, have purchased 5000 acres of timber land near Flowerce, and are building saw-mills to cut the timber on the tract.

Greenwood—Dry Goods.—Chartered: F. R. Austin Dry Goods Co., capitalized at \$50,000, by F. R. Austin, A. M. Bayne, William Lockhart, George Chambliss and others.

Hattiesburg—Lumber Plants.—J. G. McNeal of St. Clair, Ill., has located timber lands for Western capitalists, who will purchase large tracts and build a number of saw-mills near Hattiesburg.

Hazlehurst—Ice and Cold-storage Plant.—"Pitts Bros." ice and cold-storage plant, mentioned last week, will have capacity of from fifteen to twenty tons. Engineer has not been employed nor contracts let.\*

Laurel—Saw-mill.—Kingston Lumber Co. will rebuild and remodel its saw-mill and install new machinery.

Laurel—Wagon Factory.—Lindsay Wagon Co. will enlarge its plant for manufacturing log wagons, etc.

Laurel—Tie Plant.—M. T. Murphree & Co. have established tie plant of 900 daily capacity.

Lula—Woodworking Plant.—Crook & Forsyth Real Estate Co. of Odon, Ind., contemplates buying timber land near Lula and erecting mill for making vehicle materials.

Quitman County—Timber Lands.—R. J. Darnell & Son of Memphis, Tenn., have purchased 10,000 acres of timber land in Quitman county. They will cut the timber and ship in rough shape to their Memphis mills.

Rosedale—Cotton Mill.—A Saxon capitalist thinks of erecting the cotton factory mentioned last week. Chas. Scott continues to negotiate for the enterprise.

Vicksburg—Steamboat Line.—R. L. Crook, W. H. Fitzhugh, F. Stebbins, Sol Fried and others have organized Merchants & Planters' Packet Co. to operate steamboat line.

Vicksburg—Piano Factory.—The piano factory mentioned last week may be estab-

lished, and if the enterprise becomes a certainty it will be operated as the Ramsey Piano Co. Frank Buck, care Sweetland Piano Co., Chicago, who was mentioned, will probably attend to many of the details.

#### MISSOURI.

Joplin—Fuel Company.—Chartered: Nevins Fuel Co., capital stock \$15,000, by E. S. Nevins, J. M. Young and E. V. Jackson.

Kansas City—Construction.—Chartered: Federal Construction Co., capitalized at \$100,000, by H. F. Reddig, J. O. Reddig, J. B. Delany and others.

Kansas City—Wagon Factory.—Beggs Wagon Co. of Carrollton, Mo., has purchased site at Kansas City, where it will erect building and remove its wagon-manufacturing machinery.

Melbourne—Lumber Company.—Farmers' Lumber Co. has been chartered, with \$5000 capital, by W. H. Metcalf, O. M. Sulzar and others.

Norborne—Supply Company.—Henry Beckemeier, Ella M. Cunningham and W. S. Crouch have incorporated Cunningham-Beckemeier Supply Co., with capital stock of \$50,000.

Parkville—Grain Company.—Chartered: Parkville Grain & Elevator Co., capitalized at \$7500, by H. G. McAfee, C. P. Breen, J. W. Stephens and others.

Plattsburg—Light and Power.—Plattsburg Light & Power Co. has been incorporated, with capital stock of \$40,000, by M. J. Trimble, Claude Funkhouser, J. C. Funkhouser and others.

St. Joseph—Carriage Company.—Chartered: Schenck Carriage Co., capitalized at \$15,000, by Louis V. Schenck, Vernon Beggs and others.

St. Joseph—Coal Mines.—Chartered: Bevier Coal & Mining Co., capitalized at \$50,000, by J. H. Van Brunt, J. J. Branton, Eugene Cooper and others, to develop coal mines.

St. Joseph—Engraving Plant.—Chartered: Michaels Engraving Co., capitalized at \$10,000, by Robert Michaels of New York, Frank M. Hanna and H. W. Sharrow of St. Joseph.

St. Joseph—Engraving Plant.—Chartered: Michaels Engraving Co., capital \$4000, by Frank M. Hanna, Frank H. Bierman, H. W. Sharrow and others.

St. Louis—Bakery.—Chartered: Enterprise Baking Co., capitalized at \$6000, by Sirine W. Graham, Maud Graham and Granger Graham.

St. Louis—Construction Company.—Chartered: Arctic Construction Co., capitalized at \$100,000, by H. McK. Wilson, F. D. Hager, Edwin Westen and others.

St. Louis—Brake Company.—W. W. Hopkins, P. H. Turner and Samuel W. Fordyce have incorporated Hopkins Brake Co., with capital stock of \$50,000.

St. Louis—Steam Bakery.—Columbia Biscuit Co., reported last week, has incorporated, with capital of \$300,000. Alfred C. Reynolds, John T. McGinnis, Harry E. Hockman, John T. Craighead, H. B. Grubbs and others are the incorporators. They will build plant to work up 600 barrels of flour daily; offices in Gay Building; H. B. Grubbs, manager.\*

St. Louis—Calcium-light Company.—A. P. Erker and associates have chartered Missouri Calcium Light Co., with capital of \$4000.

St. Louis.—Independent Incandescent Lamp Co. has chartered, with capital of \$20,000; Harry M. Coudrey, Walter L. Gilliam, Walter Ennes and others, incorporators.

St. Louis—Machine Shops.—Terminal Railroad Association of St. Louis, W. S. McSheehy, general manager, has let contract to Geo. Fuller Construction Co. of Chicago for construction of machine shop and powerhouse.

#### NORTH CAROLINA.

Ahoskie—Extract Factory.—Wayland Hill has established plant for manufacturing extracts, yeast powder, etc.

Asheville—Lumber Plants.—Alleghany Land & Lumber Co., reported incorporated last week, has capital stock of \$20,000, which will probably be increased to \$100,000 at an early date. Company will deal in timber lands and erect saw-mills. Organization will be effected soon. Address care Henry B. Stevens, No. 23 Temple Court.

Asheville—Printing Plant, etc.—Hackney & Moale Co. has been incorporated, with capital of \$30,000, to conduct printing plant, etc.; Geo. L. Hackney, Philip R. Moale and others, incorporators.

Burlington—Steel Bridge, etc.—Chartered: Carolina Steel Bridge Construction Co., capitalized at \$250,000, to build bridge, etc.; incorporators, H. M. Brady of Chattanooga,

Tenn.; G. W. Anthony and J. B. Thomason of Burlington.

Charlotte—Machine and Lumber Plant.—Charles F. Wadsworth, George P. Wadsworth and associates have chartered J. W. Wadsworth Company, with capital stock of \$100,000, to conduct a machine shop and saw-mill.

Charlotte—Grocery.—Chartered: Carolina Grocery Co., capitalized at \$25,000, by W. J. Chambers, W. H. Clark, W. J. Edwards and others.

Concord—Foundry and Machine Shop.—Concord Foundry & Machine Co. will enlarge its plant.

Concord—Electric-light and Ice Plants.—Thomas A. Scott and Reuben Barton of Richmond, Va., have secured franchise for lighting at Concord, and will erect are and incandescent electric plant; also will build 25-ton ice factory.

High Point—Silk Mill.—New Jersey manufacturers contemplate building silk mill, and have optioned site from J. Elwood Cox.

Jacksonville—Telephone System.—W. J. Grantham of Catharine Lake, N. C., will establish telephone system, connecting Jacksonville and Kinston with several intermediate towns; line to be about forty miles long.\*

Lexington—Gold Mine.—W. J. Brent of Portsmouth, Va., will organize company to develop gold mine near Lexington.

Lexington—Trousers Factory.—Chartered: Ureka Trousers Co., capitalized at \$10,000, by J. W. Noell, J. T. Hedrick, J. D. Grimes, W. G. Penny and others, for manufacturing trousers.

Manly—Electric-light and Water Works, etc.—W. O. Ruggles and associates, New England capitalists, will establish health resort and village, build water-works and electric-light plant and construct improved streets, etc.

Monroe—Supply Company.—Chartered: Houston-Lee Supply Co., capital stock \$25,000, by D. A. Houston, W. A. Lane and Winston Lee.

Rocky Mount—Real Estate.—Chartered: Wilkinson-Bullock Company, capitalized at \$20,000, by W. S. Wilkinson, J. D. Bullock and others.

Shallotte—Transportation Company.—Chartered: Shallotte Transportation Co., capital stock \$50,000, by Frank P. White, S. K. Mints, G. F. Bowen and others, for operating steamboats.

Spray—Woolen Mill.—B. Frank Mebane, W. R. Walker and J. S. McAllister of Spray, D. F. King and A. E. Millner of Leaksville, N. C., have incorporated Spray Woolen Mills Co., with capital stock of \$105,000, to operate woolen mill.

Spray—Cotton Mill.—Spray Water-Power & Land Co. has closed negotiations ensuring erection of cotton mill. Main building will be 100x300 feet. No other details announced.

Tusculum—Lumber Plant.—Georgia and North Carolina parties will establish lumber plant. J. M. Williams can give information.\*

Warsaw—Tobacco Company.—W. L. Hill, J. N. Johnson, C. E. Hussey and others have incorporated Warsaw Tobacco Co., with capital stock of \$25,000.

Washington—Electric-light Plant.—S. C. Bragaw has received franchise for establishment of electric-light plant.

Whittier—Excelsior Factory.—Dickson Lumber Co. has established an excelsior factory.

Wilmington—Iron Works.—Chartered: Hanover Iron Works Co., capitalized at \$50,000, by S. W. Skinner, W. E. King and Iredell Mears.

#### SOUTH CAROLINA.

Blacksburg—Iron Mines.—W. L. Rushton of New York, reported in September as having arranged to develop the Cherokee iron mines, has organized Bessemer Iron Ore Co., with capital stock of \$500,000, to develop the properties. R. M. Gilmour of 84 John street, New York, has been elected president.

Charleston—Furniture Factory.—Chartered: Lion Furniture Co., capitalized at \$10,000, with E. G. Cook, president; W. K. Cook, vice-president, and B. H. Modley, secretary; purpose, to deal in and manufacture furniture.

Charleston—Hardware Company.—Chartered: Charleston Hardware Co., capital stock \$5000, by J. E. Bonneau and W. W. Meggett.

Lockhart—Cotton Mill.—Lockhart Mills will increase capital stock from \$250,000 to \$1,000,000 and build an additional \$250,000 mill. Company now has 25,000 spindles and 800 looms.

Paxville—Saw-mill.—Harvin Lumber Co. will rebuild next spring its saw-mill recently

burned. This burned plant was not the company's large mill.

Summerville—Ice and Cold-storage Plant.—Chartered: Summerville Ice & Cold Storage Co., to operate ice and cold-storage plant, by Milton P. Skinner, Thomas D. Leiby and David Miller; capital stock \$30,000.

Summerville—Warehouse Company.—Chartered: Summerville Warehouse Co., capital stock \$3000, by W. H. Richardson and J. J. Westcott.

Union—Construction Company.—Chartered: Union Construction & Real Estate Co., by Thomas C. Duncan and L. G. Young.

Union—Mercantile.—Chartered: New Era Investment Co., capital \$2500, by E. L. De Pour, W. S. Hughes, D. D. Davis and others.

White Stone Springs—Electric-power Plant, J. T. Harris will build plant to supply power to electric railway two miles long.\*

#### TENNESSEE.

Chattanooga—Brewery.—Chattanooga Brewing Co. has begun erection of additional buildings at its brewery. One structure will be five stories high, 75x150 feet, costing about \$75,000. Another \$75,000 will be expended for additional machinery, etc.

Chattanooga—Boiler Works.—Walsh & Weidner Boiler Manufacturing Co. has begun the erection of additional buildings, and will install additional machinery to double its boiler works. About \$30,000 will be expended.

Chattanooga—Machine Shops.—Sherman Manufacturing Co., manufacturer of boilers, standpipes, etc., will erect an additional machine shop and install modern machinery. About \$20,000 will be expended.

Chattanooga—Bottling Plant.—Coca-Cola Bottling Co. will erect additional building to cost \$3500 and install new machinery for its bottling plant.

Chattanooga—Foundry.—Cumberland Foundry & Manufacturing Co. is receiving bids for improvements and enlargements to its plant. Betterments will include 12-ton cupola, cokehouse, paint shop, truck scales, etc.

Chattanooga—Mercantile.—Chartered: Talley-Chatlin Mercantile Co., capitalized at \$15,000, by E. W. Chatlin, H. B. Talley and others.

Hamilton County—Coke Ovens.—Hamilton Coal Co., C. E. Jones, president, Chattanooga, has purchased 19,500 acres of coal land in Hamilton county for \$65,000, and will develop the mines, also erect coke ovens.

Lawrenceburg—Cannery.—J. F. Staff of Terre Haute, Ind., contemplates establishing cannery.

Memphis—Lumber Company.—J. Marlin Speed, F. J. Warner, Scott W. Moore, John P. Bullington and C. D. M. Greer have incorporated Memphis Lumber Co., with capital stock of \$5000.

Memphis—Ice-cream Factory.—Hoadley Ice Cream Co. has increased capital from \$5000 to \$15,000.

Memphis—Dry Goods.—Chartered: Wm. R. Moore Dry Goods Co., capitalized at \$100,000, by Wm. R. Moore, Robert H. McLean, Oron M. Peck, W. J. Armstrong and others.

Memphis—Molasses Cannery.—C. E. Coe contemplates installing plant for canning molasses.\*

Nashville—Clothing Factory.—Incorporated: Lyles, Black & Co., capitalized at \$200,000, by R. J. Lyles, J. W. Black, W. A. Allen and others, for the manufacture of clothing.

Nashville—Furniture Factory.—Bradford Manufacturing Co. has leased buildings at 150 South College street, and will install machinery for manufacturing spring mattresses, cots and furniture.

Newport—Zinc Mine.—W. H. Shugart, Box 55, states that valuable zinc deposits have been located near Newport.

Spring City—Lumber Plant.—Ed. Glander, F. T. Conkling, M. Maher and H. C. Jacob, all of Greenville, Ohio, have purchased 6000 acres of timber land near Spring City. They will organize Spring City Lumber Co. to build saw-mill on the tract. Bonham & Shilt will operate the mill.

Springfield—Electric-light and Water Works.—City has fully decided on the construction of its proposed water-works and electric-light plant. Robert Lund of Nashville has prepared plans and specifications. Bids are being invited; H. T. Stratton, mayor.\*

Tellico Plains—Copper Mines.—It is reported that William Spence of Athens, Tenn., will develop copper mines at Tellico Plains.

Trenton—Electric-light Plant.—City contemplates buying and enlarging a local electric-light plant. Address "The Mayor."

West Point—Iron Mines, etc.—Sheffield



Coal & Iron Co. has been organized with J. W. Bledsoe, general manager, and W. E. Bennett, superintendent, and will develop iron mines, daily output to be forty cars. Coal lands will be developed later on. Henry Gass is engineer in charge.\*

#### TEXAS.

Beaumont—Oil-well Machines.—Chartered: Higgins Oil Well Machine Co., capitalized at \$250,000, by S. B. Cooper, C. L. Nash, O. B. Graves, Pattillo Higgins and others.

Beaumont—Oil Refining.—Chartered: Beaumont Refining Co., capital stock \$200,000, for refining crude petroleum and the manufacture of by-products thereof; directors, M. B. Yates of Royse City, Texas; J. S. McNamara of San Antonio, R. W. Josey, A. A. Bailey of Beaumont, Texas, and R. H. Childs of Marietta, Ohio.

Benjamin—Mercantile.—Incorporated: Stewart Bros., capitalized at \$50,000, by G. B. Stewart, J. J. Perry and others.

Bonham—Dry Goods.—Chartered: Wolds Dry Goods Co., capitalized at \$50,000, with W. T. Hancock, president, and Bland Smith, secretary.

Dallas—Telephone System.—Joseph D. Lloyd of Wilkesbarre, Pa., has applied for telephone franchise. He represents capitalists who are now constructing telephone lines throughout the State.

Dallas—Telephone Lines.—Southwestern Telephone & Telegraph Co. is planning extensive construction of new telephone lines in its Texas and Western territory.

Denison—Lumber Mill.—J. M. Rockwell of Houston, A. A. Rockwell of Durant, I. T., and C. J. Bayne of Denison have incorporated Denison Lumber Co., with capital stock of \$20,000, to operate lumber mill.

Gordon Valley—Telephone System.—S. P. Veavey, A. J. Nowlin, W. L. Garland and G. E. Browning have incorporated S. P. Veavey Telephone Co., with capital of \$3,000, to establish telephone system.

Granger—Water-works.—Granger Water Co. will improve and extend its water-works, as was reported lately. W. H. Kelso, manager, can be addressed.\*

Houston—Rice Elevator.—Texas & Missouri Rice & Land Co. has let contract to Charles Stutler for erection of rice elevator to cost \$40,000.

Houston—Cotton Mills.—A. M. Hatcher is reported as having arranged with Eastern financiers for establishment of three cotton mills, one to be a 15,000-spindle and 244-loom plant costing \$225,000.

Marlin—Cannery.—Marlin Cannery Co. is being organized to establish cannery by Geo. S. Cousins, L. N. Stanley, S. J. Johnson and others.

Paris—Telephone Company.—Citizens' Telephone Co. has increased capitalization from \$120,000 to \$150,000.

San Antonio—Steam Laundry.—Chartered: Paul Laundry Co., capitalized at \$900, by Ben M. Wofford, C. H. Bertrand and E. F. Glaze.

San Antonio—Irrigation System, etc.—Chartered: Acme Irrigation Co., capital stock \$50,000, by Homer T. Wilson, G. W. Johnson, S. W. White, E. T. Hughes, Frank Weinrich, A. L. Curry, Mrs. Bettie White and Syd Williams of San Antonio, and W. A. Wilson of Belton and S. V. King of Beaumont. It is proposed to irrigate 1200 acres of land and cultivate fruit and vegetables; also erect a cannery.

Stamford—Ice Plant.—C. W. Zug, W. J. Norton and R. V. Colbert have incorporated Stamford Ice & Refrigerator Co., with capital stock of \$25,000.

Timpson—Cotton Compress.—Timpson Compress & Storage Co. has been organized, with capital stock of \$25,000, to build cotton compress; H. R. Forry, president; C. D. Hill, vice-president, and H. H. Peden, secretary.

#### VIRGINIA.

Arlington—Saw-mills.—Two large band-saw mills will be built on the line of Virginia-Carolina Railway, of which W. E. Mingea is president.

Bristol—Coal Mines.—Climchfield Coal Co. has been chartered, with capital stock of \$100,000, to develop coal lands it has purchased in Southwest Virginia. George L. Carter is president; J. Normant Powell, vice-president, and C. B. Anderson, secretary.

Norfolk—Chemical Works.—H. Blunt Hunter will establish works for production of epsom salts, glauber salts and other chemicals.

Norfolk—Oil Refinery.—Oliver Refining Co. has been incorporated, with capital stock of \$300,000; John Oliver of Norfolk, president; George Swisher of Portsmouth, Va., vice-president, and Frederick Oliver of Charlotte,

N. C., secretary. Company acquires the oil refinery recently built by the Messrs. Oliver.

Norfolk—Realty.—Hope Realty Co. has been incorporated, with \$5000 capital; W. J. Shepherd, president, and C. E. Townsend, secretary.

Norfolk—Steel-blind Factory.—James Godfrey Wilson of Olean, N. Y., will establish the steel-blind factory mentioned last month as proposed. He has purchased eighteen acres of land as site, and will build machine shop, factory, office building, etc. J. Kevan Peebles is preparing plans for the buildings. Percy Wilson of Olean, N. Y., will be local manager. A \$250,000 company will be organized to own and operate the plant.

Norton—Coke Ovens.—I. F. Kane of Gate City, Va., and associates have abandoned their contemplated organization (reported recently) of company to build 100 coke ovens.

Petersburg—Harbor Improvements.—C. P. E. Burgwyn of Richmond has received contract at about \$20,000 for deepening the channel of Appomattox river.

Petersburg—Woodenware Factory.—Southside Manufacturing Co. will rebuild its plant, burned recently, for manufacturing boxes, crates, butter dishes, etc.

Richmond—Trunk Factory.—Galbraith Trunk Co. has been incorporated, with capital stock of \$5000, to manufacture trunks, valises, etc.; A. L. Thomas, president; W. J. Galbraith, Jr., secretary.

Richmond—Tobacco Factory.—John Wright, reported lately as proposing to build a tobacco factory, will unite, it is reported, with Surbrug & Co. of New York city in establishing the enterprise.

Richmond—Builders' Supplies, etc.—Sitting-Carney-Davis Company has been incorporated, with capital stock of \$100,000, to deal in builders' supplies, etc.; W. Creed Davis, president; F. Sitting, vice-president, and F. Will, secretary.

Richmond—Seeds Dealers.—Diggs & Beadles Company has been incorporated, with capital of \$30,000, to deal in seeds, etc.; Albert C. Diggs, president; John R. Beadles, vice-president, and A. Percy Diggs, secretary.

Salem—Water-works.—It is rumored that city has engaged P. C. Nugent of 409 Howard street, Syracuse, N. Y., to prepare plans for extending the municipal water-works.

Williamsburg—Knitting Mill.—Williamsburg Knitting Mill Co. will add new machinery.

Wise C. H.—Coal Mines.—John C. Stamps, Henry G. Kyle, A. B. Rogan and B. F. Simpson, all of Rogersville, Tenn., have incorporated Guest's Mountain Coal & Coke Co., purchased and will develop 3000 acres of coal land. Capital stock is \$500,000.

#### WEST VIRGINIA.

Beckley—Coal Mines.—Cyrus E. Scott, Harry C. Elliott, John F. Davis, A. B. Redden and T. J. McGe. Beckley have incorporated Mascot Coal & Coke Co., with capital stock of \$100,000, to mine coal and manufacture coke.

Belington—Coal Mines.—Chartered: Stetler Coal & Coke Co., capitalized at \$2,000,000, to develop coal mines, by S. N. Stetler, C. P. Matthews, S. L. Bowston, Chas. F. McBride and W. L. Hill, all of Scranton, Pa.

Bessemer (P. O. at Martinsburg)—Cement Mill, Limestone Quarries, etc.—Bessemer Limestone Co. will open limestone quarries, also install electric-light plant, and has contracted with International Cement Co. of Pittsburg, Pa., for locating a cement mill.

Beverly—Coal Mines.—It is reported that Rees, Shaw & Strader will develop coal mines.

Bluefield—Lumber Plant.—Pendergast Lumber Co. of Chillicothe, Ohio, has purchased 15,000 acres of timber land, and will establish plants for cutting railroad ties.

Cameron—Pottery.—C. H. Parriott and associates propose organizing Cameron Pottery Co., with capital stock of \$50,000, to build four-kiln plant for manufacturing fine china.

Cameron—Brick Works.—Bruce Crow and associates propose the erection of brick works. No contracts have been let.\*

Corinth—Coke Ovens.—Oakland Coal & Coke Co. contemplates building fifty additional coke ovens.

Digman—Coal Mines.—J. M. Guffey Coal Co. of Wheeling has completed surveys of 6000 acres of coal land near Digman, and will open mines.

Elkins—Timber Lands.—Warren C. White of Cumberland, Md., has purchased 3500 acres of timber lands near Elkins.

Fairmont—Foundry and Machine Shop.—Helmeck Foundry & Machine Co. will double its plant.

Flemington—Coal Mines.—Black Hawk Coal Co. has begun the development of its coal lands.

Glenville—Lumber Company.—Incorporated: Glenville Boom & Lumber Co., capital \$50,000, by J. S. Withers, Linn Brannon, W. J. Holben and S. A. Hays of Glenville, and C. E. Vandecander, Parkersburg, W. Va.

Hendricks—Bridge.—Chartered: Brooklyn Heights Toll Bridge Co., capitalized at \$2000, by C. D. Gillespie, James Craven, A. W. Windrom and others to build toll bridge.

Huntington—Mercantile.—Chartered: Jarvis & Brother Co., capitalized at \$10,000, by J. H. Jarvis, Rufus Spitzer, George S. Jarvis and others.

Huntington—Lifting-jack Works.—F. L. Doolittle, H. M. Sams, M. E. Brown, J. C. Miller and E. J. Harvie have incorporated Maxon-Miller Jack Co. to manufacture lifting jacks. Capital stock is \$10,000.

Huntington—Coal Mines.—C. T. O'Ferrall, Jr., of Roanoke, Va., is organizing company to develop coal mines near Huntington. Capital will be more than \$100,000. Address Mr. O'Ferrall at Florentine Hotel, Huntington, W. Va.\*

Lamont—Coal Mines.—W. A. Ohley of Charleston, A. J. Baker, P. Jones and J. C. James of Hinton, W. Va., and James Kay of Charleston have incorporated Lamont Mining Co. for developing coal mines. Capital is \$10,000.

Lincoln County—Coal Mines.—W. C. Sproull of Chester, Pa., has purchased 13,000 acres of coal lands in Lincoln county, and will open mines.

Matewan—Coal Mines.—J. A. Williams of Matewan, John W. Booth, Geo. T. Booth, H. E. Wade and J. A. Ballard of North Fork have incorporated Marvin Coal Co., to develop coal mines. Capitalization is \$25,000.

Monroe—Development Company.—Incorporated: Monroe Development Co., capitalized at \$10,000, by E. C. Hunter of Richmond, Va.; J. E. Roles, A. S. Johnson, R. L. Clark and others of Union.

Randolph—Timber Lands.—W. H. Cobb of Cumberland, Md., has purchased for development 3000 acres of timber lands in Randolph county; purchase price said to be \$30,000.

St. Albans—Coal Mines.—E. C. Colcord of St. Albans, J. H. Rowland of Port Deposit, Md.; J. Roman Way of Williamsport, Pa.; John Wehrle of Charleston, W. Va.; S. C. Rowland of Baltimore, Md., and others have incorporated Rowland Land Co. to conduct a general coal-mining business.

Tucker County—Pulp Mill.—West Virginia Pulp & Paper Co. of Parsons, W. Va., will build another mill, to be located in Tucker county.

Wellsburg—Coal Mines.—Wellsburg Coal Co. will establish plant to develop its 1000 acres of coal lands, output to be fifty carloads daily.

Wheeling—Coal Mines.—A \$40,000,000 coal-mining company of France contemplates buying and developing extensive coal properties in West Virginia. It will establish headquarters in Wheeling next spring to make thorough tests of the coal and afterwards open mines. A large steel plant may also be built eventually by members of the company. A. and P. Picard of Paris, France, representing the company, are registered at the McLure Hotel.

Wheeling—Electrical Supplies.—Chartered: Bellaire Electric Co., to deal in electric supplies, capital \$30,000, by Joseph A. Armstrong, James W. Corbett and W. A. Smith of Bellaire, Ohio; Harry L. Hesse and Andrew Armstrong of Wheeling.

#### INDIAN TERRITORY.

Bartlettville—Gas and Oil Wells.—It is stated Cudahy Packing Co. of Chicago and Kansas City has leased and will develop oil and gas lands near Bartlettville.

Miami—Electric-light and Water Works.—Miami Water-Works & Electric Light Co. is being organized to construct water-works and electric-light plant, franchise for which has been granted. Thomas V. Hale of South McAlester, I. T., is one of the promoters.

Ralston—Hardware Company.—Incorporated: Sherwin Hardware & Implement Co., with \$5000 capital, by Willard W. Sherwin of Fort Scott, Kan.; George F. Sherwin of Ralston, I. T.; Frank F. Sherwin of Wichita, Kan.

#### OKLAHOMA TERRITORY.

El Reno—Water-works.—El Reno Water Co. will make extensive improvements to the water-works mentioned last week, including installation of one or two power pumps of 1,000,000 gallons capacity. C. D. Hill is superintendent. A Chicago engineer will be engaged to plan the betterments. No contracts let yet.\*

Guthrie—Gas Wells.—Chartered: Guthrie

Gas & Development Co., with \$125,000 capital stock, by O. P. Cooper of Guthrie, W. R. Payne and Henry S. Clarke of Chicago, Ill.

Norman—Lighting Plant.—Incorporated: Norman Lighting Co., with \$15,000 capital stock, by James Chenoweth of Oklahoma City, Benty Ulen, Jr., and Samuel Perratt of Indianapolis, Ind.

Oklahoma City—Oil Wells.—Chartered: Newspaper Men's Oil Co., with capital stock of \$100,000, by Robert T. Heed of St. Louis, Mo.; R. E. Stafford and Herbert Galbraith of Oklahoma City, and J. C. Niblack of Guthrie, O. T.

Shawnee—Drug Company.—C. C. Pottenger and L. O. Morgan of Shawnee and Ray Hoffman of Chandler, O. T., have incorporated C. C. Pottenger Drug Co., with capital stock of \$50,000.

Wakita—Mercantile.—Chartered: Farmers' Co-operative Union of America, capital stock \$100,000, by M. A. Clark, J. F. Hendricks, P. R. Smith and associates.

#### BUILDING NOTES.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Annapolis, Md.—Office Building.—Washington, Annapolis & Baltimore Electric Railway Co. will build office and station building.

Attalla, Ala.—Bank Building.—L. C. Harding and associates of Baltimore, Md., have contracted for erection of bank building.

Baltimore, Md.—Depot.—Pennsylvania Railroad will build passenger station on Gay near Preston street. Plans for \$20,000 structure have been obtained, and J. J. Walsh & Sons have same for bids.

Baltimore, Md.—Theater.—C. S. Bradfute, Louis H. Baker and associates have let contract to R. J. Cushen for remodeling building into a theater. About \$15,000 will be expended.

Baltimore, Md.—Warehouse.—E. L. Kaufman & Co. will build six-story warehouse; office at Liberty and Fayette streets.

Brookhaven, Miss.—Jail.—"County Supervisors" are considering erection of jail, for which they recently authorized the issuance of \$20,000 in bonds.

Catonsville, Md.—Church.—Owens & Slisco of Baltimore will revise plans for erection of Salem Lutheran Church building. Amount available for contract is \$15,000.

Catonsville, Md.—Electric Power-house.—United Railways & Electric Co. of Baltimore has received plans from Jackson C. Gott for erection of power-house at Catonsville; structure to be 60x64 feet, costing \$15,000; P. O. Keilholtz, engineer in charge.

Clinton, La.—School.—City will soon ask bids on erection of school building, for which \$7500 in bonds was voted recently. Address "The Mayor."

Columbus, Miss.—City Hall.—W. T. Christopher has received contract to erect city hall, also fire-engine station.

Conway, S. C.—Mercantile Building.—Hal L. Buck Company will erect brick store building.

Danville, Ky.—Dwellings.—M. J. Farris and associates have awarded contract for erection of ten dwellings.

Fort Worth, Texas—Hotel.—S. F. Dutton, registered at Worth Hotel, announces that Western capitalists will build a \$500,000 hotel; structure to be seven stories high, 150x180 feet, 215 rooms, 85 with baths attached, etc.

Gadsden, Ala.—Mercantile Building.—R. L. Adams will erect three-story addition to mercantile building. Electric-light and steam-heating equipment will be installed.

Goldsboro, N. C.—Jail.—County commissioners will open bids January 10 for erection of addition to jail, including both brick and steel work, in accordance with plans and specifications on file with W. G. Britt, registrar of deeds.

Greenville, Miss.—Hospital.—Greenville Circle Kings Daughters, No. 2, proposes erecting \$20,000 hospital.

Hempstead, Texas—Roundhouse.—Houston & Texas Central Railroad will build roundhouse; J. N. Miller, manager, Houston.

Houston, Texas—Office Building.—Southern Pacific has advertised for bids on erection of the proposed seven-story office building; C. H. Markham, vice-president.

Houston, Texas—Hotel.—Seabrook Land Co. is interested in proposed erection of hotel.

Jackson, Tenn.—Association Building.—Y. M. C. A. will erect \$20,000 building; L. L. Curtis, president.

Jacksonville, Fla.—Warehouse.—J. H. Durkee will build warehouse 87x105 feet, after plans and specifications by Gilkes & Rodd.

Jesup, Ga.—Courthouse.—Wayne county has let contract to T. J. Darling of Waycross, Ga., at \$18,950 for erection of courthouse.

Kansas City, Mo.—Clubhouse.—Manufacturers and Merchants' Building Association, Fernando P. Neal, secretary, will erect clubhouse to cost \$40,000.

Kansas City, Mo.—Terminal Facilities, Depots, etc.—J. Ogden Armour and Gustavus F. Swift, both of Chicago, Ill., have purchased control of Union Depot, Bridge & Terminal Co. and certain lands adapted for terminal facilities. They propose to build union depot, construct terminal facilities and make various improvements as their packing plants at Kansas City develop greater proportions.

Laurel, Miss.—Store Building.—C. A. Anderson of Oakes, Miss., will erect brick store building.

Louisville, Ky.—Hotel.—Louis and Otto Seelbach contemplate building hotel.

Manchester, Va.—Bank Building.—W. A. Neal contemplates building \$8000 bank building.

Maun, N. C.—Hotel.—W. O. Ruggles and associates will build hotel.

Morgantown, W. Va.—Power-house.—Morgantown Electric & Traction Co. will open bids December 15 for construction of power-house 88x94 feet, of fireproof construction. Plans and specifications now on view.

Nashville, Tenn.—Theater.—Frank Cox, architect, of Chicago, Ill., will prepare plans for erection of theater to seat about 1500.

New Orleans, La.—Bank Building.—Permit for erection of four-story addition to Germania Savings Bank has been issued. Contract let to L. Frolick at \$23,000.

New Orleans, La.—Mercantile Building.—Permit has been issued for erection of Fellman Building, to cost \$21,000; John Minot, contractor.

New Orleans, La.—Warehouse.—Ahrens & Ott have obtained permit for erection of \$74,000 warehouse. Cook & Laurie are the builders.

Owensboro, Ky.—Business Building.—Owensboro Undertakers' Association will erect modern stone and brick building, three or four stories, to be used for undertakers' purposes and offices.

Owensboro, Ky.—Church.—Members of Christian Church will erect a new building to cost \$25,000; R. H. Crossfield, pastor.

Owensboro, Ky.—Business Building.—McAtee, Lyddane & Ray will erect a five-story building for department store.

Petersburg, Va.—Depot.—Atlantic Coast Line Railway has let contract to G. W. Lambert of Richmond for erection of freight depot one story high, of brick, 60x376 feet.

Richmond, Va.—Cathedral.—J. E. & A. L. Pennock of Philadelphia, Pa., have received contract for erection of Roman Catholic cathedral to cost about \$300,000. Structure will be cruciform in shape, 70x130x200 feet, etc. They have local office at 12 East Main street.

Richmond, Va.—Warehouse.—T. W. Wood & Sons contemplate building a seed warehouse, site alone to cost \$40,000.

Richmond, Va.—Warehouse.—T. W. Wood & Son will build warehouse.

Roanoke, Va.—Hospital.—The \$25,000 hospital reported last week under Richmond will be built at Roanoke. John J. Garry is the contractor. W. P. Ginter is the architect.

Ruston, La.—Building.—Ritchie & Co. of Camden, Ark., will erect two-story brick building 90x110 feet.

Ruston, La.—Store Building.—Ruston Hardware & Supply Co.'s building, reported last week, will be two stories high, 52x150 feet, with pressed-brick and plate-glass front. Mann & Gibbs of Little Rock, Ark., have prepared the plans, and contract will be let December 15.

St. Louis, Mo.—Hotel.—James Hayward, 803 Fullerton Building, and associates will build hotel to cost \$1,000,000.

St. Louis, Mo.—Hotel.—Saxonia Realty Co. proposes building hotel to cost \$1,000,000. Ernest C. Jansen will prepare plans and specifications.

St. Louis, Mo.—Train Shed, Subway, etc.—Terminal Railroad Association of St. Louis, W. E. McChesney, general manager, will construct subway 100 feet wide and 14 feet high to facilitate handling baggage. There will be thirty-two elevators built and other facilities provided. Contract for constructing subway has been awarded to James Stewart & Co.

Tampa, Fla.—Hospital.—City contemplates

building hospital at cost of \$10,000. Address "The Mayor."

Vicksburg, Miss.—Office Building.—Rawson & Faunuck are architects for the proposed office building of Herbert Shirk of Indiana, reported last week. It is not, however, finally decided that the structure will be erected.

Warren, Ark.—Courthouse.—Bradley county will build courthouse to cost \$45,000. Plans by F. W. Gibb of Little Rock have been accepted. Bids on construction will be invited soon. Address "Bradley County Commissioners."

Washington, N. C.—Stables.—Washington Horse Exchange, B. L. Susman, proprietor, will erect 50x100-foot addition to stables.

West Arlington, Md.—Temple.—Daniel E. Ensor of Baltimore is preparing plans for erection of \$10,000 Masonic temple. J. Richard Smith, West Arlington, is interested.

Whiteville, N. C.—Bank Building.—Bank of Whiteville will erect bank building. H. E. Bonitz of Wilmington will prepare the plans; structure to be two stories high, 25x75 feet.

## RAILROAD CONSTRUCTION.

### Railways.

Anniston, Ala.—Surveys are being made, it is reported, for a connection between Anniston and the East & West Railroad of the Seaboard system via Jacksonville. J. W. Bushnell is engineer at Cedartown, Ga.

Baltimore, Md.—President W. H. Bosley of the Suffolk & Carolina Railway writes the Manufacturers' Record that construction will begin within ten days on the line, beginning at or near Bosley, N. C., east to Elizabeth City, N. C., about twenty-five miles.

Beaumont, Texas.—The Beaumont, Port Neches & Port Arthur Electric Railway Co. has been granted a franchise in Beaumont, and construction is to begin as soon as the weather permits. Most of the material necessary is reported on the ground.

Bluefield, W. Va.—A letter from President F. J. Kimball of the Norfolk & Western Railway is published, stating that the company's improvements at Bluefield will amount in value to about \$500,000. The yards will be extended and the tracks rearranged.

Brevard, N. C.—The Transylvania Railroad Co. informs the Manufacturers' Record that it is extending its line southwest ten miles. J. F. Hays is general manager.

Bristol, Tenn.—The South & Western Railway, which is being extended from Johnson City to a connection with the Seaboard Air Line, has, it is reported, completed its extension to a point south of Bakersville, in Mitchell county, North Carolina. It will, it is understood, run via Morganton to Lincoln.

Cedartown, Ga.—It is reported that the Southern Railway is making a survey for a line to Cedartown. W. H. Wells is engineer of construction, Washington, D. C.

Charleston, Mo.—The Charleston & Mississippi River Railroad Co. has been chartered to build a standard-gauge railroad from a point in Scott county to a point in Mississippi county opposite Hickman, Ky., the line passing through or near Charleston, and being fifty miles long. The incorporators and the number of shares each one holds are: Paul B. Moore, 4000; Edward G. Rolwing, Joe Hart, Mrs. Charles J. Moore, all of Charleston, 250 shares each; Mrs. F. A. Brooks of Cape Girardeau, 250 shares; capital of the company, \$500,000.

Charleston, W. Va.—The Clarksburg & Buckhannon Railroad Co. of Buckhannon, W. Va., has been chartered, with a capital of \$300,000. The incorporators are D. F. Bailey, G. F. Stockert, W. P. Towkes and J. G. Hall of Buckhannon, and D. W. Jacobs of Clarksburg.

Charlotte, N. C.—E. L. Probst & Co. of Charlotte are completing a two-and-one-half mile line for the Southern Railway Co. from Wilson's Mills, N. C., to the ore mine of the Empire Steel & Iron Co. of Greensboro.

Chester, S. C.—The Manufacturers' Record is officially informed that the Carolina & Northwestern Railway Co. is changing its gauge from three-foot to standard between Gastonia and Chester, forty-five miles, and hopes to complete the work early in January. The gauge is already changed to standard between Lenoir and Gastonia, sixty-five miles.

Clarksburg, Tenn.—H. C. McCreary & Co. are reported to have the contract for the Tennessee Central extension to Hopkinsville, Ky. Address at the Glenn Building, Clarksburg.

Cleburne, Texas.—The Dallas, Cleburne & Southwestern Railroad has authorized a bond issue for its proposed extension. W. D.

Myers of Cleburne is president, and among the other directors are W. A. McDonald of Cleburne, A. C. Irvine of Gainesville, J. E. Fessler of Sherman and Paul Nelson of Fort Scott, Kan.

Connellsville, Mo.—The Iowa & St. Louis Railway Co., according to official information received by the Manufacturers' Record, proposes to extend its line from Macon to St. Louis, 150 miles, and from Centerville, Iowa, to Sioux City, about 225 miles. The line now extends from Macon, Mo., to Centerville, Iowa, eighty-six miles. H. F. Reddig is president.

Crockett, Texas.—P. A. McCarthy, chief engineer, has completed the preliminary survey for the extension of the Eastern Texas Railroad from Kennard to Crockett, nineteen miles.

Cumberland, Md.—The Baltimore & Ohio Railroad's new line from Confluence, in Garrett county, is reported to be about half completed.

Cumberland, Md.—It is reported that the Baltimore & Ohio Railroad Co. will build a number of sidings at Cumberland. J. M. Graham is chief engineer, Baltimore, Md.

Dallas, Texas.—The report that the Chicago, Rock Island & Gulf Railway Co. has let contracts for its proposed extension from Dallas to Galveston, 270 miles, is officially denied. W. E. Dauchy is chief engineer, Chicago, Ill.

Descubridora, Mexico.—W. C. Harris, general superintendent and chief engineer Durango Central Railroad, writes the Manufacturers' Record that the company contemplates building an extension to El Oro and Guanacevi, about 150 miles. The line thus far built is from Conejos, on the Mexican Central, to Descubridora.

Enid, Okla.—The Blackwell, Enid & Texas Railway of the Frisco system announces that it has put in operation its line from Vernon, Texas, to Choctaw Junction.

Fairmont, W. Va.—The Buckhannon & Northern Railroad Co. has been secured by J. T. Blair and others of Parkersburg in the interest of the Wabash system, and the line will be built seventy-two miles to the Little Kanawha Railroad, of which Mr. Blair is president.

Fairview, Okla.—W. C. Edwards of Wichita, Kan., is reported to have a contract for ten miles of grading from Fairview south on the Kansas City, Mexico & Orient Railway.

Frederick, Md.—The Monocacy Valley & Frederick Railroad Co., capital \$120,000, has been incorporated by Alexander Ramsburg, Luther Zimmerman, Charles Ramsburg, Dr. Steiner Schley of Frederick, and L. R. Waesche of Thurmont, to acquire the Monocacy Valley Railroad, now running between Thurmont, on the Western Maryland, south to Catoclin Furnace, four miles, and to extend it to Frederick, about eleven miles, via Lewistown, Charlesville and Yellow Springs.

Granger, Texas.—The Granger, Georgetown, Austin & San Antonio Railway Co. has been organized to build from Granger to San Antonio. A. A. Allen of St. Louis, who is vice-president and general manager of the Missouri, Kansas & Texas system, was elected president; C. M. Jones of Granger, vice-president, and W. Van Riper of St. Louis, secretary and treasurer. The line may be extended to Cameron and Trinity, 120 miles.

Gulfport, Miss.—The final survey for the proposed Natches & Gulf Railway is practically completed. Col. W. W. Hungerford of Gulfport is chief engineer.

Guthrie, Okla.—The Choctaw, Oklahoma & Gulf Railroad (Rock Island system) will, it is reported, build a line from Halleyville, I. T., to Dallas, Texas, about 100 miles, connecting it with Guthrie by a link from Halleyville to Chandler; also that a line will be built from Halleyville to Muscogee connecting with the Kansas City line. Furthermore, that the company projects a line west from Guthrie to connect with the El Paso line of the Rock Island. F. A. Molitor is chief engineer, Little Rock, Ark.

Guthrie, Okla.—The incorporators of the Enid, San Diego & Pacific Railroad, recently chartered, are John B. Linden, president of the Denver, Enid & Gulf, the Frisco extension from Enid to Guthrie; John Murphy, Edmund W. D. F. C., P. J. and W. P. Frantz, all of Enid. The Frantz's are also stockholders in the Enid-Guthrie route. The route for the San Diego line through Oklahoma passes through Grainfield, Woods, Blaine, Dewey, Woodward, Day and Beaver counties, thus bringing it close to the southern State line of Colorado. It will go to San Diego, Cal.

Hancock, Md.—Engineers for the Western Maryland Railroad are reported to have be-

gun the survey for the proposed extension between Cumberland and Cherry Run, F. H. Parsons heading the party. F. S. Landstreet is vice-president and general manager of the Western Maryland; office at Hillen Station, Baltimore.

Hempstead, Texas.—The Houston & Texas Central Railroad is reported to have purchased twenty-two acres of land from H. S. Graves, and will build yards and sidings. A. V. Kellogg is engineer maintenance of way, Houston, Texas.

Huntsville, Ala.—It is reported that an electric railway will be built from Huntsville to Monte Sano. Major J. F. O'Shaughnessy is said to be interested.

Jefferson City, Mo.—The Osage & Ozark Railway Co. of Eldon, Mo., has been incorporated to build a line twenty-five miles long from Eldon, on the Lebanon branch of the Missouri Pacific, to the Osage Iron Works, in Camden county. The incorporators are A. F. Brown, J. F. Cox, W. H. Glaskins, S. E. Snider and Charles C. Culp, all of Kansas City. It is reported that the line is a Missouri Pacific project.

Kansas City, Mo.—W. C. McCaul, president of the Oklahoma Central & St. Louis Railway Co., and also of the Central Oklahoma Union Depot & Terminal Railroad Co., writes the Manufacturers' Record that the first-named corporation has an engineering corps in the field making the permanent location, and hopes to have the contractors at work on the grade before the new year; also that the Terminal Company proposes to build about 200 miles of terminal tracks. It will build union terminals and belt line in Guthrie and Oklahoma City, and may build similar terminals in other cities, including Carthage and Joplin, Mo.

Kansas City, Mo.—J. Ogden Armour and Gustavus F. Swift have, it is announced, purchased the interests of Theodore C. Bates in the Union Depot, Bridge & Terminal Railway Co. and 3000 acres of land on the north side of the Missouri river to build a new railroad terminal. George H. Ross of Chicago has succeeded Mr. Bates as president of the company.

Knoxville, Tenn.—Pitts & Sullivan are subcontractors on the Knoxville, La Follette & Jellico Railroad between La Follette and the Narrows. Ed. Condon and J. J. Reeder have taken subcontracts on the Saxton cut-off.

Knoxville, Tenn.—The Knoxville & Bristol Railroad has been sold to a syndicate headed by Bird M. Robinson of New York, president of the Harriman & Northeastern Railroad, and they may be connected by an extension.

Little Rock, Ark.—The Arkansas & Northern Railroad, plans of which were recently described in the Manufacturers' Record, has secured a charter to build its proposed line, seventy-five miles long, from Pocahontas to Newport, Ark., by way of Powhatan and Black Rock. The officers are Dr. J. H. Myers, president; R. B. McCreery, vice-president, and C. T. Burns, secretary and treasurer. The offices are at Black Rock. Capital is \$1,000,000. M. D. Wilson of Missouri is also interested.

Littleton, N. C.—The Fosburgh Lumber Co. of Norfolk, Va., is reported to be about to build a railroad from a point on the Seaboard Air Line near Gaston via Aurelian Springs, Brinkleyville, Ransom's Bridge to Raleigh.

Marlinton, W. Va.—The map for the Iron Mountain & Greenbrier Railway has been filed. The line is to be built up the north fork of Anthony's creek, down Douthard's creek to Knapp's creek, and thence to Huntersville. F. I. Cabell is engineer of construction, Chesapeake & Ohio Railway, Richmond, Va.

Maryville, Tenn.—The Tennessee & North Carolina Southern Railroad has elected as directors A. B. Andrews, Fairfax Harrison, H. Miller, Henry Fonds and William F. Finley, all of whom are stated to be in the Southern Railway. The line is to be built from Maryville to the North Carolina State line, about forty-five miles, to connect with a line in that State.

Nashville, Tenn.—The Nashville & Clarksburg Railway, which proposes to build an electric railroad, has filed application through T. M. Watson for rights of way over the White's creek turnpike.

Nashville, Tenn.—A company is being organized, it is reported, to build a railroad from White Cliffs to Nashville. Among those interested are Capt. George M. Clark and A. L. Skillern, Dr. J. S. Corn, Ike Loewenberg, J. P. Exall, D. P. Terry, Feazel & Bishop.

Navasota, Texas.—Grading is nearly completed between Navasota and Madisonville on the extension of the International & Great Northern.



**New Roads, La.**—It is proposed to build an electric railway about thirty-two miles long around False river from New Roads.

**Oklahoma City, Okla.**—President F. N. Finney of the Missouri, Kansas & Oklahoma Railway proposes, it is reported, to build an extension from the Coffeyville & Guthrie line northwest through Pawhuska to Arkansas City, Kan., about sixty miles.

**Oklahoma City, Okla.**—It is reported that tracklaying will begin on the Missouri, Kansas & Oklahoma line from Luther to Oklahoma City on January 1. F. N. Finney is president at Oklahoma City.

**Oklahoma City, Okla.**—The Atchison, Topeka & Santa Fe Railway will, it is reported, build freight and passenger terminals immediately at Oklahoma City. J. Dun is chief engineer, Chicago, Ill.

**Pine Bluff, Ark.**—The Pine Bluff & Arkansas River Railway has floated \$25,000 in bonds to build a five-mile extension from English to Reydel. W. H. Langford is president, at Pine Bluff.

**Pinetown, N. C.**—The Washington & Plymouth Railroad Co. proposes to extend its line thirty-five miles to New Berne, and negotiations for the extension are pending. Surry Parker is general manager.

**Roanoke, Va.**—O'Brien & Long of Roanoke are reported to have a contract for building double track on the Norfolk & Western Railway.

**Rome, Ga.**—It is reported that an extension of the East & West Railroad of the Seaboard Air Line will be made from Rockmart to Rome, about twenty miles. J. W. Bushnell is engineer at Cedartown, Ga.

**Rutherfordton, N. C.**—Engineers have, it is reported, begun a survey for the proposed Rutherfordton, Hickory Nut Gap & Asheville Railroad.

**Shreveport, La.**—Announcement is made of the opening of the Shreveport & Red River Valley Railway's extension from Alexandria to Mansura, thirty-one miles.

**St. Joseph, Mo.**—It is reported that the St. Louis & San Francisco, the Chicago & Alton and the Wabash railroads will enter St. Joseph from Kansas City by a new double-track line forty-seven miles long. C. D. Purdon is chief engineer of the "Frisco" system, St. Louis, Mo.; H. F. Baldwin is chief engineer of the Chicago & Alton at Chicago, Ill., and W. S. Newhall is chief engineer of the Wabash at St. Louis.

**St. Louis, Mo.**—Concerning the Southern Railway's line from Harrodsburg to Danville, Ky., an official informs the Manufacturers' Record that the work will be comparatively light, the grades easy and the line direct, nine miles long. B. C. Milner is engineer maintenance of way at St. Louis.

**Talladega, Ala.**—Grading is reported nearly finished on the Eastern Railway of Alabama, now under construction from Talladega to Pylton, twenty miles.

**Uniontown, Ky.**—The Evansville, Mt. Vernon & Uniontown Railroad Co. has applied for a franchise. It will connect Uniontown with Mt. Vernon and Evansville, Ind.; estimated cost of line \$625,000.

**Washington, D. C.**—The Washington, Baltimore & Annapolis Railway is reported to have purchased the Annapolis, Washington & Baltimore Railroad, twenty-two miles long, from Annapolis Junction via Odenton to Annapolis, Md., and will use it for its branch to Annapolis. James Christy, Jr., is general manager of the electric line; office at the Bond Building, Washington.

**West Liberty, Ky.**—E. B. Carr of Philadelphia is reported to be general manager of a new railroad being built to develop coal and timber lands by Brooklyn and Buffalo capitalists.

**West Point, Tenn.**—The Sheffield Coal & Iron Co., Henry Gass, engineer in charge, is building a railroad two and one-half miles long, the construction being done by Contractor Crow of West Point. J. W. Bledsoe is general manager, and W. E. Bennett, superintendent.

**Wheeling, W. Va.**—It is reported that the Pennsylvania Company will build double track on its line to Wheeling. Thomas Rodd is chief engineer at Pittsburgh, Pa.

**Winnfield, La.**—Mr. G. Knobel, chief engineer of the Louisiana & Arkansas Railroad, writes the Manufacturers' Record that track is being laid on the 23-mile extension northward from Stamps to Hope, connecting there with the St. Louis, Iron Mountain & Southern and the St. Louis & San Francisco railroads; also that an extension southeast from Winnfield, seventy-eight miles, is under contract to be completed next year. According to the annual report, this latter extension consists of a main line to Alexandria from Winnfield, and a branch from Packton twenty-eight miles to Jena.

#### Street Railways.

**Austin, Texas.**—The Austin Electric Street Railway Co. has been granted permission to build its own track on East Seventeenth street.

**Birmingham, Ala.**—The Birmingham Railway, Light & Power Co. is rebuilding the old dummy line between Powderly and Bessemer. The Birmingham & Bessemer line is being converted into an electric road, and the line to Ensley is completed and will soon be put in operation.

**Fort Worth, Texas.**—The city council has passed over the mayor's veto the street-car franchise granted about two weeks ago to the Northern Texas Traction Co.

**Jackson, Miss.**—It is reported that the governor has approved a charter for an electric line belt railway for the city of Jackson, in which local business men are interested.

**Little Rock, Ark.**—T. P. Paine, vice-president and general manager of the United Securities Co. of Boston, controlling the Little Rock Traction & Electric Co., is quoted as saying that \$500,000 and probably more will be spent in improving the street-railway system, including an extension to Pulaski Heights.

**Mobile, Ala.**—D. A. Lamson, contractor for grading the extension of the Mobile Light & Railroad Co.'s electric railway from Toulminville to Whistler, has completed all but half a mile of the work.

**Morgantown, W. Va.**—The Morgantown Electric & Traction Co., George H. Switzer, superintendent, and Walter Loring Webb, consulting engineer, is receiving bids until noon on December 15 for laying about four miles of street-railway track.

**Richmond, Va.**—The work of reconstructing the Clay Street Railway of the Passenger & Power Co. has begun.

**St. Louis, Mo.**—The Elevated Electric Railway Co. of St. Louis has been incorporated, with \$100,000 capital, by John Dwyer, Charles Erd, Theodore F. Meyer, E. R. Darlington and August V. Brecht, to build and operate a double-track elevated street railway.

**Wheeling, W. Va.**—The Wheeling Traction Co. proposes to construct a number of switches, and has applied for a franchise.

#### Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

**Air Compressor.**—Clark Haire, Deward, Mich., wants belt-driven air compressor that will furnish 50 to 100 feet of free air per minute.

**Bakery Equipment.**—Columbia Biscuit Co., H. B. Grubbs, manager, Gay Building, St. Louis, Mo., will buy boilers, engine, electric motors, generators, dynamo, ice machine, biscuit machinery, shafting, pulleys, etc.

**Boiler and Engine.**—Currie Fertilizer Co., Louisville, Ky., will perhaps need 150 to 200 horse-power slow-speed Corliss engine, with boiler.

**Boilers.**—See "Sugar-house Machinery."

**Boilers and Engine.**—See "Bakery Equipment."

**Bottling Plant.**—Big Four Co-operative Co., Box 92, Sulphur, I. T., wants bottling machinery.

**Brick Machine.**—John J. Rea, Sistersville, W. Va., wants small portable brick machine.

**Brick Machinery.**—John C. Blair, Wytheville, Va., wants estimates on cost of vitrified brick machinery.

**Brick Works.**—Bruce Crow, Cameron, W. Va., will need brick works, including dry-house, engine, boiler, etc.

**Broom Machinery.**—Miss Jennie Cates, Newnan, Ga., wants addresses of makers of broom-manufacturing machinery.

**Building Materials.**—W. O. Ruggles, Manly, N. C., wants catalogues and prices of lumber, cement, lime, plumbing fixtures, galvanized pipe, etc.

**Building Materials, etc.**—J. F. Barnes, contractor, Jackson, Miss., will need electric wiring, cement, lime, press bricks, metal

roofing, composition roofing, fine hardware, building papers, sash, door, cord and weights, plaster paris, stone work, steel and iron work, etc.

**Building Supplies.**—J. A. Blunt, Greensboro, Ala., will want a large quantity of asbestos sheets and floor filling made of seaweed.

**Can Machinery.**—Huffman Bros., Appold, Va., want to correspond with makers of machinery for manufacturing tin cans.

**Cannery Machinery.**—C. E. Coe, Memphis, Tenn., wants prices on machinery for molasses cannery.

**Cornmeal Mill.**—Wallace Bros., Wallacetown, Va., are in market for grist mill to grind cornmeal, to be operated by gasoline engine.

**Delinting Machinery.**—James T. Stewart's Son, Savannah, Ga., wants addresses of makers of machinery for delinting upland cottonseed, that is, for separating lint from the seed in short-staple cottonseed.

**Ditching Machinery.**—J. N. Walker, Burroughs, Ga., wants catalogues and prices on portable ditching machines operated by traction engines.

**Electrical Locomotive.**—See "Railway Equipment."

**Electrical Machinery.**—See "Engine."

**Electrical Machinery.**—Henderson-Cranford Buggy Co., Valdosta, Ga., will want motor and sand-belt machine, also machinery for running drill machines, etc.

**Electrical Machinery.**—See "Bakery Equipment."

**Electric-light Plant.**—City of Springfield, Tenn., will open bids December 15 for construction of water-works and electric-light plant. Copies of specifications, forms of proposals, etc., can be seen at office of H. T. Stratton, mayor, or of Robt. L. Lund, engineer, at Nashville. Systems will include tower and tank, pipe line with accessories, generating set and distribution system for lighting plant, pumps, boilers, etc.

**Electric-power Plant.**—J. T. Harris, White Stone Springs, S. C., wants to buy dynamo, wire, cars, etc., for power plant and railway of two miles length.

**Elevator.**—Bids will be opened January 6 for installation of elevator for ashes in United States custom-house at St. Louis, Mo. Specifications, etc., furnished, at discretion of supervising architect, by "Custodian of Custom-house."

**Engine.**—See "Cornmeal Mill."

**Engine.**—W. D. Carmichael, Marion, S. C., will want small engine to operate pump, electric fans and light plant in hotel.

**Engine.**—Ferguson Lumber Co., Little Rock, Ark., is in market for 150-horse-power left-hand slide-valve engine, for six-inch four-side outside molder, and for 100-light dynamo, all to be second-hand in first-class condition.

**Excelsior Machinery.**—R. A. Fewell, Meridian, Miss., wants machinery for manufacturing excelsior.

**Foundry Equipment.**—J. P. Moser, Okahumpka, Fla., wants full equipment for foundry and machine shop.

**Furniture Machinery.**—S. J. Durham, Bessemer City, N. C., wants addresses of makers of furniture-manufacturing machinery.

**Furniture Machinery.**—T. S. Gregory, Sumter, S. C., wants addresses of makers of furniture machinery.

**Heating Plant.**—Edw. B. Pasano, 6 South Calvert street, Baltimore, Md., has not yet decided on system of heating for suburban cottage.

**Hoops.**—L. B. Turner, Oxford, N. C., is in market for hoops.

**Ice Machine.**—See "Bakery Equipment."

**Ice Machines.**—W. P. Jacobs, Clinton, S. C., wants to correspond with makers of ice machines for small consumers.

**Ice Plant.**—Pitts Bros., Hazlehurst, Miss., will need equipment for 15 to 20-ton ice and cold-storage plant.

**Logging Equipment.**—See "Railway Equipment."

**Lumber Plant.**—J. M. Williams, Tusquitee, N. C., wants catalogues of saw-mill machinery.

**Machine-shop Equipment.**—See "Foundry Equipment."

**Machine Tools.**—Clark Haire, Deward, Mich., wants an engine-tire lathe.

**Machine Tools.**—Fort Scott Sugar & Sorghum Syrup Co., Fort Scott, Kan., is in market for good second-hand engine lathe, swing not less than eighteen inches and bed about fourteen feet long.

**Mining Cars.**—See "Railway Equipment."

**Mining Equipment.**—C. T. O'Ferrall, Floristine Hotel, Huntington, W. Va., will soon be ready to consider estimates on cars, rails,

tipple, roofing, machinery, etc., for drift coal mining.

**Mining Machinery.**—See "Well-drilling Machinery."

**Mining Machinery.**—Sheffield Coal & Iron Co., West Point, Tenn., will need ore-mining machinery, boilers, and small locomotive.

**Mining Plant.**—Halifax Placer Mining Co., 1321 F street N. W., Washington, D. C., wants prices on hydraulic mining plant operated by water-power for installation in the South.

**Powder-mill Machinery.**—J. T. Moore, president Jellico Powder Works, Jellico, Tenn., wants to buy "wheel mill" or mixer and powder press.

**Railway Equipment.**—See "Mining Machinery."

**Railway Equipment.**—Campbell Coal & Coke Co., Orme, Tenn., will need motor for haulage or light locomotive, fifteen to thirty horse-power, to draw thirty-five mining cars of one ton each capacity.

**Railway Equipment.**—C. F. Finch, Thomasville, N. C., wants good second-hand 10 to 12-horse-power Shay geared locomotive and four or five logging cars, all for wood rails; also a slab conveyor, including 400 feet of chain, sprocket, gear wheels, etc.

**Railway Equipment.**—W. G. Duncan Coal Co., Luzerne, Ky., will need electric locomotive.

**Railway Equipment.**—H. J. McLaurin, Jr., Sumter, S. C., is in the market for about two miles of second-hand 20-pound T rail, with fish plates and bolts.

**Roofing, etc.**—Dunn Lumber Co., Dunn, N. C., is in market for 5000 square feet of metal siding and roofing for same building.

**Sewerage System.**—City of Demopolis, Ala., wants bids on construction of sewerage system. Plans are on file. About \$15,000 to \$20,000 will be expended. Address "The Mayor."

**Sewer Work.**—City of Fernandina, Fla., will open bids January 7 for construction of sewers, about 34,000 feet in all, piping ranging from 6 to 15-inch, manholes, etc., to be included. About \$26,000 is to be expended. Blank forms, etc., can be seen at office of Roland Woodward, C. E., 23 Main street, Jacksonville, Fla.

**Sugar-house Machinery.**—John Closner, Hidalgo, Texas, will need by next July two 125-horse-power boilers, a four-and-one-half-foot six-roller cane mill, nest of three modern centrifugals, bagasse burners, with boilers, etc.

**Tank.**—Ernest Burgdorf, 410 Eighth street, Washington, D. C., wants to buy wooden tank.

**Telephone Equipment.**—W. J. Grantham, Catharine Lake, N. C., wants prices on telephone instruments, wires, etc.

**Water-works.**—See "Electric-light Plant."

**Water-works Machinery.**—El Reno (O. T.) Water Co. will need one or two power pumps of 1,000,000 gallons capacity, and one large boiler; also supplies for two wells, points, etc. Contracts will be awarded about January 1.

**Water-works Supplies.**—Granger Water Co., W. H. Kelso, manager, Granger, Texas, wants prices on mains, fire hydrants, gasoline engines, power pump, elevated tank, etc.

**Well-drilling Machinery.**—Vinita Oil, Coal & Gas Co., L. W. Marks, secretary, Vinita, I. T., will want guaranteed well drills to drill 150 feet; also wants diamond or core drill for coal prospecting.

**Woodworking Machinery.**—See "Engine."

**Woodworking Machinery.**—See "Furniture Machinery."

**Woodworking Machinery.**—See "Electrical Machinery."

**Woodworking Machinery.**—A. Dan Morgan, Teale, S. C., will need four-sided tongue-and-groove machine and a resaw.

#### TRADE LITERATURE.

**Handles Nernst Lamps.**—George A. Williams Company, 56 Montgomery street, Jersey City, N. J., is mailing attractive catalogues of the Nernst lamp. For railroad service, factories and machine shops, street lighting, stores, office buildings, private houses, art galleries, and, in fact, in any place where artificial light is used and an alternating current can be secured, this lamp is valuable. The agents are making extensive sales.

**Keystone Water Meter.**—The Pittsburgh Meter Co., East Pittsburgh, Pa., is mailing a folding card illustrating its Keystone meter and the 21-story Frick Building, the entire water supply for which is measured through two six-inch Keystone water meters. This meter has repeatedly demonstrated its ability to measure accurately large volumes of water under the most severe

conditions. The combined daily capacity of these two meters is 2,600,000 gallons.

**Brick and Tile Machine.**—The Kells Foundry & Machine Co., Hudson, Mich., manufacturer of brick and tile machinery, is mailing a catalogue of these machines, which have been on the market for thirty years. It is said that it may be used without a pug mill, the clay being taken from the bank and placed in the machine in its crude state, water being added should the clay be too dry. It tempers the clay, although sand may be added if desired. The machine is strong, simple and durable, and the finished product of good quality.

**Limoid Blotters.**—Charles Warner Company, 810 Land Title Building, Philadelphia, Pa., is issuing three blotters, advertising Limoid. Limoid is a pure preparation of lime, possessing, it is claimed, when mixed with water, all the qualities of lime putty. It is said to require no slaking, to contain no free lime, and to generate no heat on being mixed with water. It is reported to be a good building material, and especially suitable for plastering. These three blotters set forth the above facts and others equally interesting in a concise manner. They are intended for free distribution.

**Of Interest to Miners.**—"Edson Prospecting and Mining Outfit" is the title of an interesting book which the Edson Manufacturing Co., Boston, Mass., is now mailing to interested parties. These are being given general circulation throughout mining sections, and will be gladly sent to anyone interested in mining or prospecting. This prospecting and mining outfit is a light, although powerful, hand-power lift and force pump for mining operations. It is practical, economical and valuable. The extensive sale, wide demand and many duplicate orders should serve as an index to its worth.

**Good Catalogue.**—The American Mechanical Cashier Co., 40 Wall street, New York, is issuing a catalogue which for handsome typographical appearance and an interesting and concise way of presenting its contents is seldom equaled. The paper is fine, and the arrangement artistic. The mechanical cashier performs precisely the functions its name implies. It receives money, places it beyond the reach of the operator, records the transaction and the number of the operator who makes it, stamps the cash check with the amount, totalizes and makes change. It is said that this device cannot make a mistake nor be beaten.

**Expanded Metal.**—The "doings" of expanded metal, especially for fire-protective purposes, are illustrated by a book of half-tone reproductions of photographs of some of the great buildings of the United States and Canada in which expanded metal is employed. The book is well arranged and illustrated. This method of fireproof construction is used in roofs, floors, ceilings, partitions, side walls, elevators and dumb-waiter shafts and all other parts of buildings of any class. It is largely used as a basis for concrete, and takes the place of inflammable lathing in wall construction. This book is being distributed by the New York Expanded Metal Co., 256 Broadway, New York City, N. Y.

**Beautiful Invitation.**—A beautifully simple and attractive menu of the Thanksgiving dinner at the St. Charles Hotel in New Orleans has been received from the proprietors of that establishment, A. R. Blakely & Co., Ltd. The St. Charles under this management has grown and improved until it is now recognized by the traveling public as one of the finest hotels not only of the South, but of the United States. The table is excellent, and the accommodations since the extensive improvements and enlargements all that they should be. This Thanksgiving menu is an exceedingly good one. A little folder on heavy cardboard, which accompanies the menu, shows eleven reasons "Why You Should Visit New Orleans."

**Beautiful Catalogue.**—"Underground Wire Rope Haulage" is the title of a very fine specimen of the printer's and engraver's art which we have just received. This is being mailed by the Broderick & Bacon Rope Co., 800 North Main street, St. Louis, Mo., and illustrates the work of this firm as successfully applied in the workings of the Coal Valley Mining Co. at Sherrard and Cable, Ill. For the modern rapid working of coal mines wire rope is being extensively employed. Its general adaptability to the requirements of this work is attested by its wide use. The illustrations in this book are from photographs taken in these mines showing the rope in use. It is intended for free distribution, and will especially interest coal operators.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office Manufacturers' Record,  
Baltimore, Md., December 10.

Few, if any, features were visible in the Baltimore stock market during the past week. Business was very dull, trading being restricted to an exceedingly small amount on account of continued tight money. One matter of interest was the decline in the common stock of the Atlantic Coast Line, and the other an advance in the bid price of the common stock of the Suffolk & Carolina Railway, the latter being due to the improved prospects of the company, which is about to extend its line to Elizabeth City, N. C. United Railways securities would doubtless have shown some activity had there been any supply of money; as it was, some trading was noticeable in the common stock and also in the income bonds, but there was little doing in the first mortgage 4 per cents or in the securities of the Light & Power Company. Seaboard, recently so active, were conspicuously dull, hardly anything was seen of Cotton Duck, and G. B. & S. Brewing issues were likewise in eclipse. Traders found nothing to induce them to enter the market, and it is expected that the dullness will continue until after the interest disbursements of January 1.

In the trading United Railways common sold at 13 and 13½; the income bonds between 60½ to 60¾, while the first mortgage 4s changed hands at 95 and 95½. United Electric Light & Power 4½s sold at 84; Consolidated Gas at 70, and Gas 5s at 114. Seaboard common was dealt in at 25½, 25¾ and 26, and the preferred at 44; the 4 per cents at 83 to 83½, and the 5s at 101¼ to 101½. Cotton Duck incomes sold at 37, and G. B. & S. 1sts at 49½. Trust stocks were dull, like the rest of the list, Colonial selling at 31 and Union at 72. Drovers and Mechanics' Bank changed hands at 300; Mechanics' at 32, and First National at 164.

Other securities traded in were as follows: Atlantic Coast Line common at 148 down to 140, from which there was a recovery to 143, most of which was held; Atlantic Coast Line rights, 4 to 4½; Atlantic Coast Line 4s (S. C.) 103½; Atlantic Coast Line new 4s, 80 and 80½; Atlantic Coast Line preferred, 115; Baltimore City 5s, 1916, W. L., 121¼ and 122; do. 4s, 1920, H. R., 112½; do. 4s, 1925, W. M., 115; do. 3½s, 1930, 100¾; Georgia & Alabama Consol. 5s, 111, 111½ and 111½; Virginia Railway & Electrical Development 5s, 97; Consolidation Coal, 84; Virginia Midland 4ths, 113; Virginia Midland 5ths, 114½; Anacostia & Potomac 5s, 90; Canton Company, 100; Firemen's Insurance, 23; City Passenger 4½s, 102¼; City Passenger 5s, 107; North Baltimore 5s, 119¼; George's Creek Coal, 114; Georgia, Carolina & Northern 5s, 112½; Nashville Railway common, 4½; Savannah, Florida & Western 5s, 116¾.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
December 10, 1902.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	100	171
Georgia Sou. & Fla. 1st Pref.....	100	97½	98
Georgia Sou. & Fla. 2d Pref.....	100	81	81
Southern Railway (V. T.) Pref.....	100	92½	93
United Railways & Elec. Co.....	50	13	13½
Seaboard Railway Common.....	100	25	26½
Seaboard Railway Preferred.....	100	43	44

### Bank Stocks.

Commercial & Far. Nat. Bank.....	100	135	140
Drovers & Mech. Nat. Bank.....	100	164	170
First National Bank.....	100	107½	108
German Bank.....	100	100	105
Manufacturers' Nations, Bk.....	100	100	105
National Bank of Baltimore.....	100	125	125
National Bank of Commerce.....	15	28½	29
National Exchange Bank.....	100	196	200
National Howard Bank.....	10	11½	11½
National Marine Bank.....	30	37	37
National Mechanics' Bank.....	10	32	33½
National Union Bank of Md.....	100	117	118
Old Town Bank.....	10	11	11½
Second National Bank.....	100	190	190
Third National Bank.....	100	132	132

### Trust, Fidelity and Casualty Stocks.

Baltimore Trust & Guarantee.....	100	307	318
Colonial Trust.....	50	30	30½
Continental Trust.....	100	212	212
Fidelity & Deposit.....	50	160	160
International Trust.....	100	140	146
Maryland Casualty.....	25	55	54½
Maryland Trust & Deposit.....	100	150	150
Mercantile Trust & Deposit.....	50	165	165
Union Trust.....	50	70	71½
U. S. Fidelity & Guaranty.....	100	146	152

### Miscellaneous Stocks.

G. B. & S. Brewing Co.....	100	12	13
United Elec. L. & P. Pref.....	50	35	40
Cotton Duck Voting Trust.....	100	4	10
Consolidation Coal.....	100	83	85
George's Creek Coal.....	100	110	114
Consolidated Gas.....	100	70	71
Ala. Con. C. & I. Common.....	100	35	37
Ala. Con. C. & I. Preferred.....	100	89	89

### Railroad Bonds.

Atlanta & Charlotte 1st 5s, 1907.....	113½	113½
Char. & Aug. 1st 5s, 1910.....	117	117
Char. & Aug. 2d 7s, 1910.....	104½	104½
Columbia & Greenville 1st 6s, 1916.....	113	120
Georgia, Car. & North. 1st 5s, 1929.....	112½	112½
Richmond & Danville Gold 6s, 1915.....	120	121½
Savannah, Fla. & West. 5s, 1934.....	116½	118
Seaboard & Roanoke 5s, 1926.....	112	112
Southern Railway Con. 5s, 1934.....	118	119
Virginia Midland 2d 6s, 1911.....	113½	115
Virginia Midland 5th 5s, 1926.....	114½	115½
Charleston City Railway 5s, 1922.....	106½	110
Charleston Con. Elec. 5s, 1909.....	89	92
Newport News & Old Pt. 5s, 1938.....	108½	108½
Norfolk Street Railway 5s, 1944.....	112	112
United Railways 1st 4s, 1949.....	94½	96
United Railways Inc. 4s, 1949.....	66½	66½
Seaboard 4s.....	83	83½
Seaboard 10-year 5s.....	83	101½
Lexington Railway 1st 5s.....	102	102
Georgia & Alabama Con. 5s.....	111½	111½

### Miscellaneous Bonds.

Mt. V. & Woodb'y Cot. Duck Inc.....	26½	27
G. B. & S. Brewing 1st 3½s.....	49	50
G. B. & S. Brewing 2d Income.....	35	36½
United Elec. Light & Power 4½s.....	83½	85
Consolidated Gas 6s, 1910.....	113	113
Consolidated Gas 5s, 1930.....	113½	114½
Ala. Con. C. & I. 1st 6s.....	100	100

### SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for  
Week Ending December 9.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	76	76
Aiken Mfg. Co. (S. C.).....	59	62
Anderson Cotton Mills (S. C.).....	123	127½
Arkwright Mills (S. C.).....	115	126
Augusta Factory (Ga.).....	62	62
Avondale Mills (Ala.).....	85	85
Bennettsville Mfg. Co. (S. C.).....	85	85
Bibb Mfg. Co. (Ga.).....	108	108
Brandon Mills (S. C.).....	95	101
Buffalo Cotton Mills (S. C.).....	100	101½
Buffalo Cotton Mills (S. C.) Pfd.....	101½	101½
Cabarrus Cotton Mills (N. C.).....	122	122
Chiquola Mfg. Co. (S. C.).....	101	101
Clearwater Bichy & Mfg. Co. (Ga.).....	104	104
Clifton Mfg. Co. (S. C.).....	174	185
Clinton Cotton Mills (S. C.).....	118	118
Columbus Cotton Mills (Ga.).....	88	88
Courtenay Mfg. Co. (S. C.).....	122	130
Dallas Mfg. Co. (Ala.).....	85	85
Darlington Mfg. Co. (S. C.).....	88	93
Eagle & Phenix Mills (Ga.).....	94	96½
Easley Cotton Mills (S. C.).....	85	85
Enoree Mfg. Co. (S. C.).....	85	85
Enterprise Mfg. Co. (Ga.).....	79	79
Exposition Cotton Mills (Ga.).....	151	151
Gaffney Mfg. Co. (S. C.).....	91	94
Granby Cotton Mills (S. C.).....	102	102
Granby Cotton Mills (S. C.) Pfd.....	102	102
Graniteville Mfg. Co. (S. C.).....	155	155
Greenwood Cotton Mills (S. C.).....	103½	103½
Grendel Mills (S. C.).....	103½	106
Henrietta Mills (N. C.).....	200	210
King John P. Mfg. Co. (S. C.).....	87	87
Lancaster Cotton Mills (S. C.).....	100	110
Langley Mfg. Co. (S. C.).....	102	106
Laurens Cotton Mills (S. C.).....	162	162
Lockhart Mills (S. C.).....	100½	104
Louise Mills (N. C.).....	103	103
Mayo Mills (N. C.).....	140	140
McColl Mfg. Co. (S. C.).....	112	112
Mills Mfg. Co. (S. C.).....	103	103
Mills Mfg. Co. (S. C.) Pfd.....	103	103
Monaghan Mills (S. C.).....	94	94
Monarch Mills (S. C.).....	115	115
Newberry Cotton Mills (S. C.).....	115	115
Norris Cotton Mills (S. C.).....	104	110
Odell Mfg. Co. (N. C.).....	100	106½
Olympia Cotton Mills (S. C.).....	100	100
Olympia Cotton Mills (S. C.) Pfd.....	98	98
Orangeburg Mfg. Co. (S. C.) Pfd.....	102	102
Orr Cotton Mills (S. C.).....	101½	101½
Pacolet Mfg. Co. (S. C.).....	123	200
Pelzer Mfg. Co. (S. C.).....	165	165
Piedmont Mfg. Co. (S. C.).....	166	166
Poe, F. W., Mfg. Co. (S. C.).....	132½	132½
Richland Cotton Mills (S. C.).....	99	99
Richland Cotton Mills (S. C.) Pfd.....	99	99
Roanoke Mills (N. C.).....	100	100
Sibley Cotton Mills (Ga.).....	62½	62½
Southern Cotton Mills (N. C.).....	124	124
Spartan Mills (S. C.).....	125	140
Triton Mfg. Co. (Ga.).....	134	146
Tucapau Mills (S. C.).....	134	146
Union Cotton Mills (S. C.).....	150	150
Union Cotton Mills (S. C.) Pfd.....	100	102½
Victor Mfg. Co. (S. C.).....	120	120
Warren Mfg. Co. (S. C.).....	98	99
Warren Mfg. Co. (S. C.) Pfd.....	108	108
Washington Mills (Va.).....	6	108
Whitney Mfg. Co. (S. C.).....	110	110
Wilmington Cot. Mills (N. C.) Pfd.....	100	100
Wiscasset Mills (N. C.).....	111	117½

[For Additional Financial News, See  
Pages 30 and 31.]

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Capital, Do You Need It	
For developing, improving, increasing, operating or installing machinery on property?	
If this is of interest, write to Mr. Edward D. Sniffen, 62 Wall street, New York, with full particulars, that he may intelligently present same to Trust Companies for their consideration, promptly advising you of approval.	
He charges no advance commission; the Trust Corporations, when the proposition is financed, pay him for obtaining the business.	
He will entertain no proposition for less than \$50,000.	
An unusual plethora of money at present time is seeking secure investment. †	



